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FISHERMEN'S MIGRATIONS
IN WEST AFRICA



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**FISHERMEN'S MIGRATIONS IN
WEST AFRICA**

Edited by

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Programme for Integrated
Development of Artisanal
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With financial assistance from Denmark and in collaboration with the Republic of Benin, the Fisheries Department of FAO is implementing in West Africa a programme of small scale fisheries development, commonly called the IDAF Project. This programme is based upon an integrated approach involving production, processing and marketing of fish, and related activities ; it also involves an active participation of the target fishing communities.

This report is a working paper and the conclusions and recommendations are those considered appropriate at the time of preparation. The working papers have not necessarily been cleared for publication by the government (s) concerned nor by FAO. They may be modified in the light of further knowledge gained at subsequent stages of the Project and issued later in other series.

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Preface

This is a collection of papers presented at the Round Table on Fishermen Migrations which took place in Kokrobite (Ghana) 6-9 November 1990. The participants were especially selected on basis of their first-hand knowledge of artisanal fisheries in West Africa and assigned to write a paper on fishermen's migrations in a specific country or area of West Africa or about the migrations of a specific ethnic group.

A few papers do not fall within this category, including the first which is a sort of report on the round-table; the second, where the author was asked to present a historical overview of West African fishermen's migrations; and the last, where the author kindly volunteered to present an "extra" paper on the very important role women play in the migration of fishermen, an often neglected aspect of the phenomenon. Two others were relevant last-minute contributions of a more technical nature (purse-seining and canoe carving), while G.V. Everett kindly filled in information on countries where for one reason or other we were unable to identify a suitable contributor in time for the meeting.

Some of the papers in this volume were originally presented in French, and we apologize for any possible inaccuracies in the translation. The French version of all the papers is in any case under preparation.

I take the opportunity once again to thank the various authors for their papers which I think will greatly increase the readers' understanding of artisanal fisheries in West Africa in general and their movements in particular.

J.M.H.
Cotonou, April 1991.

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TOWARDS A BETTER UNDERSTANDING OF
FISHERMEN'S MIGRATIONS IN WEST AFRICA

by Jan M. Haakonsen

1. Background

Almost since its inception in 1983, the Programme for Integrated Development of Artisanal Fisheries in West Africa (IDAF) has realized the enormous importance fishermen's migrations or fishermen's movements in West Africa do have in most aspects of artisanal fisheries in the region. IDAF's first associated project, the Benin Model Project, encountered the phenomenon as an unexpected complication in its development effort. As the whole project approach was based on community participation and consultation in the coastal communities where the Government had requested development assistance, the Model Project went about to consult with the communities, receiving good response.

Soon, however, it emerged that, despite their moderate sizes of the order of 500 individuals or so, many "communities" were far from homogeneous entities, as part of them were composed of "temporary" immigrants without any rights to own property and thus seen as "foreigners" (though many are actually Beninese nationals). Particularly problematic for the project was the additional fact that most of the fisherfolk, obviously the primary target group for a fisheries project, belonged to this "foreign" group which had little or no voice in the affairs of their host community as a whole. Thus many of the priority needs for development in the villages presented in community consultations had in fact little to do with fishing or related activities.

This grossly summarized example is included here just as an illustration of the problems fisheries development agents may run into in West Africa if the migration factor is not taken into proper consideration. On a wider scale, ignoring the importance of migrant fishermen may lead to policy decisions by governments which drastically reduce national fish-production and increase import dependency, as we have seen several examples of in the sub-region since the 1960's.

It is on this background that a development agency like FAO and a regional coordinating artisanal fisheries programme like IDAF, have focused on the occurrence of migrations of West African fishermen. Among the first efforts in this direction was to engage the former IDAF socio-economist to do a two month study of migrations in the Gulf of Guinea. It soon became clear, however, that two months were barely enough to catch a glimpse of such a wide-spread phenomenon.

To get a fuller picture of what had already been written on the subject, two ORSTOM researchers were then engaged to compile an annotated bibliography on fishermen's migration. It proved a difficult task, as few publications deal specifically with migration, though a large number of sources treat it indirectly while discussing West African fishing societies in more general terms. As a result, a very comprehensive bibliography was produced with over 1,600 titles classified by ethnic groups and/or countries covered and published by IDAF as Working Paper 25.

Yet a bibliography by itself was not enough to increase our understanding of migration, the next step was to get people who were working with/interested in fishermen's migrations together to discuss their point of view. The first opportunity came in July 1989 during the well-attended Symposium on Research and Artisanal Fisheries organized by ORSTOM and IFREMER in Montpellier (France). IDAF took the initiative to organize a forum on fishermen's migrations which became the base of an informal "Migration Network" to keep the interested individuals in touch with each other.

The network then helped lay the outline for a get-together about West African fishermen's migrations which was to be organized by IDAF. The idea was not just to have a general exchange of points of view between interested individuals, but to have specialists present whatever facts are known about the migrations in the different coastal countries of West and Central Africa. It was thus to be a technical meeting, if one can use such a term for largely socio-economic questions, in the same way as marine biologists periodically get together to discuss the state of the stock of a certain fish species or fishing technologists exchange their experiences about the catch rates of a certain type of gear.

The meeting itself was set for November 1990 and was to be an expert consultation having the character of an informal round-table. Selected participants were asked to present a paper on migrations covering a specific geographical area or ethnic group and following certain general guidelines. The response was very positive and actually much more enthusiastic than expected. The papers were written, in most cases sent in well in advance of the

meeting and, despite a number of communication difficulties and bureaucratic delays, all invited participants were in place when the meeting started November 6th under the chairmanship of Dr. Koffi Afful of Cape Coast University.

2. The Round Table on Fishermen's Migrations in West Africa

Artisanal fisheries have always been extremely important in Ghana. In the last few years, canoe fishermen have consistently landed over 200,000 tons of fish yearly, representing 70-80 % of total fish production in the country. Moreover, Ghana is the region's major "exporter" of fishermen who can be found regularly in at least a dozen countries.

It was on this background that Ghana was chosen by IDAF as the most appropriate spot to organize a round-table on fishermen's migrations. By sheer coincidence, the actual location of the meeting, the African Academy of Music and Arts (AAMA) near the village of Kokrobite some 25 km from Accra, turned out to be a very historical place as far as fishing is concerned. As pointed out in the opening speech of FAO's Regional Representative for Africa, indications are that Kokrobite could be "Cabo des Redes" named so by Portuguese explorer Duarte Pacheco Pereira because of the large numbers of nets he observed there, nearly 500 years ago.

It was thus in a historic atmosphere and with the sound of the breakers hitting the rocks and beaches a few yards away, that 18 participants and two observers undertook four days of intense discussions on the subject of fishermen's migrations. The whole coast from Cap Blanc to the Zaire river was covered, though the information available varies considerably from one geographical zone to another or between the different ethnic groups engaged in periodic movements across borders or within their own countries.

The amount and quality of data contained in the papers is thus not necessarily a reflection of the authors' abilities or competence. On the contrary, the papers presented really bear witness of the great effort their respective authors had put into trying to collect, extract and infer from whatever information existed in order to put together some sort of a picture of the fishermen's migrations in their particular assignment area. In doing so, they helped achieve the principal objective of the round-table discussions.

Very briefly, this was to collect as exhaustive information as possible on all aspects of fishermen's migrations in West-Africa in order to see what data exist and what is missing. The authors had specifically been asked to be descriptive rather than theoretical, and to try to put an emphasis on quantitative data

where possible. The underlying question in the whole exercise was : what is really the impact of migrant fishermen, both from the point of view of host countries and host communities and that of the countries/communities of origin.

It should also be pointed out that the term migration itself in the guidelines to authors and throughout the discussions was left extremely open. In other words, it could mean all sort of movements of fishermen between one or more locations, i.e. landing-beaches or harbors, permanent or temporary, long-term or short-term.

A second major aim of the meeting was for participants to be able to complement missing information about "their" particular area which others present may have. This is perhaps particularly useful in a subject like inter-boundary migrations where one participant may have studied a fishing group in its country of origin, while another has followed the same group in a host country : the points of view and types of data collected, can vary considerably.

It was , incidentally, very interesting to note how much information was complemented by the only actual migrant fisherman participating in the Round-Table which was otherwise composed of academics, some engaged in research, others in development aid. This fisherman, William Batch Kwofie of Komenda in Ghana, was first met with his canoes by the undersigned in Sassandra, Côte d'Ivoire in December 1987. The next encounter was on the beach of a small village in Lagos State, Nigeria, before we again ran into each other in Cotonou fishing harbour. A very good example of a migrant fisherman, in other words, and a most interesting participant in the Kokrobite meeting.

The exchange of complementary information was not alone a reason for holding a round-table discussion, a third major aim was of course to have participants debate the whole "problem" of fishermen's migration, based on their experiences in various parts of the region and also from the point of view of their various academic disciplines and professional backgrounds. Although participants were primarily selected on the basis of their personal knowledge of the question of fishermen's migrations from a broadly socio-economic point of view, their (accidental) multi-disciplinary backgrounds gave an added positive dimension to the meeting. The same can be said for the healthy mixture of full-time researchers and people engaged in practical development work. Together these two factors allowed for the presentation of different perspectives on the some phenomena.

3. Main conclusions of the meeting and suggestions for the future

It is perhaps wrong to go about discussing the conclusions of a meeting whose main purpose has been to map our knowledge, as well as the holes in our knowledge, about such an important aspect of artisanal fisheries in West Africa. The main result is in any case this publication which will allow each individual reader to draw his or her own conclusions based on the data presented in the papers and the opinions of the various authors.

Nevertheless, certain major points as well as some patterns emerge from the papers which were further elaborated in the discussions, and these should be underlined, particularly for the benefit of all those who did not participate at the round-table. What follows is a necessarily rough summary of some of the aspects of fishermen's migrations that were highlighted in the written and oral contributions at the meeting.

On the phenomenon of fishermen's migrations in West Africa :

- it should not be looked upon in isolation, human migrations have taken place in Africa since times immemorial, it is related to a number of socio-political factors, from the role of the African family to artificially set borders
- nor should one forget the global historical context with its political consequences : the timing and directions of many of the great movements over time are directly linked to historical events and their impact on colonial policies and later national policies and economies
- migrations are but one important aspect of artisanal fisheries as a whole, a sector which will probably just increase in importance in West Africa in the coming years as human populations increase and the pressure on resources becomes greater
- migrations take many forms, from short term movements over modest distances within a country to long-term "permanent" settlement in countries far away from that of origin ; other migrations take more the form of nomadism with constant and not necessarily regular movements between several places : it is thus important to identify and distinguish between the widely different patterns of movement

On migrant fishermen themselves and their motives :

- migrant fishermen generally have a great ability to adapt to new situations, including physical and human environments ; they tend to manage in the worst of conditions, and continue their fishing operations where such things as access to equipment may be a problem ; in the same way they are able to survive the worst political crises, even those resulting in mass expulsions
- communication between migrant fishermen in various locations and their families at home generally go along social channels ; cohesion within the different groups at various levels from the extended family to village of origin to ethnic group seems high despite individual competition in the fishing activity itself
- migrant fishermen are generally better equipped than those of the host communities, at least long-distance migrants, usually having larger canoes and better gear that allow them to operate farther at sea ; they also tend to show great specialization in fishing, employing mainly one or two techniques only
- the motives for fishermen to migrate vary but are usually economically based and on a desire to accumulate capital in particular ; fishing away from home is however not necessarily only motivated by "pull" factors such as greater natural resources, better access to markets, higher prices for fish, access to hard currency, availability of equipment, etc. but also "push" factors such as national economic crises on the macro level and heavy social (and thus economic) commitments on the micro level
- as men are the ones, with few exceptions, who do all the fishing in West Africa, they are the ones undertaking fishermen's migrations ; however, their women often follow them and may play at least as important an economic role as fish-processors and fish-mongers, a pattern particularly predominant in Gulf of Guinea countries

On relationships with host communities and/or countries :

- migrant fishermen are usually living in harmony or at least in peaceful coexistence with their host communities and are usually linked fairly well into their economic life, though much more rarely are they fully socially and culturally integrated, and their voice in local political affairs is generally limited

- conflicts between immigrant fishermen and local fishermen are relatively infrequent and occur mainly where they exploit the same resources (species) with similar type of gear or where the gear of one group can cause damage to that of another, e.g. driftnets getting entangled in set nets, and the like ; conflicts may also occur more easily if the migrant fishermen take their catches with them home instead of marketing them locally
- more permanent migrant communities are often highly organized with strict rules on how to behave in relation to the host community and/or host country ; efforts are made to duly respect local etiquette (e.g. paying traditional gifts to chiefs to be allowed to settle) and to be in harmony with the law and to avoid clashes with official authorities
- migrant fishermen nevertheless remain a very vulnerable group with limited rights compared to local citizens, something that helps explain the relative squalor migrant fishermen's settlements which generally are of temporary nature even when inhabited continuously for years and even generations ; as foreign immigrants in general often are subject to, the fishermen are frequently pointed out as generally culprits for crimes they have not committed and generally at the mercy of potentially adverse political decisions or the whims of local officials

On the impact of migrant fishermen both in their host communities and countries and at home :

- the technological impact of migrant fishermen varies considerably from place to place and depends on the host community's ability or willingness to adapt to new methods as well as to new forms of labour organization linked to certain fishing techniques ; in general, however, migrant fishermen, especially Senegalese and Ghanaians, come across over time as spreaders of technology
- it is not only new fishing methods that are introduced by migrant fishermen, it is also related know-how such as seamanship, mechanical skills, boat-building, etc., but perhaps just as important are the post-harvest technology introduced particularly by the wives of the fishermen and which have to do with preservation of the product (smoking, drying, fermenting, etc.).

- the catches of migrant fishermen are frequently a major source of animal protein in the countries they operate in, a source that can normally not be replaced by catches of local fishermen thus making additional imports necessary to the detriment of national foreign currency reserves ; in other words, migrant fishermen contribute to an import substitution that can attain considerable value, while often utilizing vessels and equipment purchased in their own countries
- migrant fishermen, through their presence and activities which, it must be remembered, are a primary economic activity, generate considerable local employment even in cases where there is little technology transfer or where their wives do most of the processing ; secondary and tertiary employment tends to go entirely to the locals, such as retail-marketing of fresh fish, whole-sale marketing of processed fish, transport, provision of fuel wood, etc., plus all the other jobs and services not directly related to fishing but which inevitably are needed in a fishing community, e.g. food preparation, tailoring, hair-dressing, the selling of drinks, clothes, household equipment, etc., etc.
- the fishermen's home communities also stand to benefit, first of all by the remittances to their families, but also by the fishermen's continuous identification with their origins in most cases and thus their periodic return visits with contributions to feasts and festivals ; migrant fishermen also tend to invest much of their earnings in their home village, mainly through the construction of permanent housing, but also in various economic sectors
- migrant fishermen thus have a generally positive impact both at home and away from home ; this is not a contradiction since migrant fishermen, as artisanal fishermen in general, are generators of wealth and moreover do so with relatively small investments and a minimum of outside dependency, at least compared to capital-intensive primary economic activities such as industrial fisheries or highly mechanized agriculture

On the future of migrant fishermen :

- it is generally expected that fishermen's migrations will continue on a large scale in West Africa in the coming years, despite recent political crisis such as the Senegalo-Mauritanian conflict and the civil war in Liberia which have led to the repatriation of thousands

of fishermen ; different governments also regard migrant fishermen in dissimilar ways, some seeing the foreigners as pillagers of national resources, others as beneficial to the local economies

- there are certain trends which indicate that the role of the migrant fishermen may change somewhat, as some governments insist on a more active role of the migrants in educating local fishermen, e.g. by requiring them to take up one or two local crew members ; in other places foreign fishermen may be allowed to fish and land their catches, but their women are not allowed to smoke it, only locals (though it is not clear whether this is something that will spread throughout the region)
- in several countries there is also an increasing trend for local investors with little or no fishing background to buy and equip a canoe (often brought in by migrant fishermen) and employ migrant fishermen as crews on a regular owner-employee type of contract, and indications are that this type of relationships is on the increase, perhaps eventually reducing the role of migrant canoe owners or heads of unit

The last question participants of the round table addressed themselves to was where to go from here. There was general agreement that a lot more work needs to be carried out before we really can claim to fully understand fishermen's migrations in West Africa, and while we find a reasonable data base about fish catches, number of fishermen, motorization rates, etc. in some countries of the region, others distinguish themselves with a lack of even the most basic statistics which make any further research on fishermen's migrations extremely difficult but all the more needed.

The point was made that future studies should take a more dynamic-systematic approach, and that more of an interdisciplinary effort should be made. At least the people from different disciplines should consult each other more as it will be mutually beneficial : for instance, a historian has much to learn from an economist or anthropologist, and vice versa.

At the same time it was also warned not to take migrations out of context in future research or studies, the question must be put in the larger context of artisanal fisheries. In fact, migration studies are a good entry point to the whole subject of artisanal fisheries, an economic sector of great importance in the region. Research and studies on artisanal fishermen today may be of vital importance for the next decade or so.

As to what a development agency like FAO, or a regional programme like IDAF should do in the area in the future, there were several suggestions. The most important are summarized below :

1. **HELP EDUCATE GOVERNMENTS** : there was distinct feeling among participants that governments and fishing authorities have a very limited awareness of the importance of fishermen's migrations, and that FAO's and IDAF's role should be to transmit them the knowledge acquired so far. This would help clear misunderstandings which have led to harsh measures being taken against migrant fishermen in the past, with detrimental results to the fishermen themselves, the host communities and the host countries.
2. **HELP FORMULATE POLICIES** : very few governments have laws or policies pertaining to migrant fishermen and on an interregional level, such policies are virtually non-existent. Given that it is an international organism and fishermen's migrations largely a multinational phenomenon, FAO should help develop government policies concerning these migration and help standardize them so they can be applied regionally.
3. **ADVISE OTHER DEVELOPMENT AGENCIES** : it is not only governments who need to be educated on the migration question, scores of development agencies are nowadays engaged in fisheries development projects in West Africa, and many of them could need more intimate knowledge of the questions, too.
4. **ENSURE CONTINUED CONSULTATIONS BETWEEN STUDENTS OF MIGRATION** : FAO is not a research organization, but is represented in every coastal country of the region, as is IDAF, and it is thus in a good position to monitor and follow-up studies and research conducted on fishermen's migrations which may not always be published ; contacts should in any case be maintained between the participants at the Kokrobite meeting and perhaps a meeting similar up-dating seminar organized a few years from now.

These are obviously reasonable and constructive suggestions which should be acted on. In fact, some initiative has been taken already. The first step towards educating governments is to present them with the findings on the subject so far, i.e. to make the papers presented at Kokrobite available to them as they will through this publication. Every fisheries department or ministry of coastal West and Central Africa will receive copies

of this working paper. In addition, the main conclusion of the expert consultation in Kokrobite will certainly be repeated and discussed in up-coming regional meetings on artisanal fisheries attended by representatives from various governments.

As to the more specific suggestion to help governments formulate policies on fishermen's migration, this must be considered a more long term objective perhaps requiring a specific project or even several projects. However, nothing can be achieved without the close cooperation of the governments involved, and a first step following the diffusion of the Kokrobite-papers, may be to get fisheries officials from the various countries together to survey what policies actually exist and to outline possible future courses of action.

What has been said about "educating governments" effectively also applies to the point of "advising other development agencies". Here, too, the distribution of the present publication is a first step which will be facilitated by IDAF's close contacts with other fisheries development projects in the region.

Finally, in response to the last suggestion, it must be said that FAO in general and IDAF in particular will try to follow any developments concerning migration studies in the region. Through a reactivation of the "Migration Network", IDAF can contribute to make new studies known among researchers, but in the long run, it is up to the researchers themselves to ensure they keep abreast of each other's work. IDAF is but a development programme with a limited life-span, fishermen's migrations and research on migrations will continue long after the programme has been terminated. Thus, the continuation of information exchanges will have to be ensured by others, perhaps one of the several fisheries research institutions in the region represented at the meeting could take up this function.

This being said, it will in the first instance be up to the individual readers of the following articles to develop opinions on the general conclusions presented in this introduction or the specific points made by the individual authors, bearing in mind that this is just the beginning of an understanding of a widespread and extremely important aspect of West Africa's fisheries. We have just been scratching the surface, much work lies ahead, but at least the first outlines of what directions this work may take have been drawn. Any additional suggestion would, of course, be most welcome.

Cotonou, March 1991

**THE HISTORICAL GEOGRAPHY OF FISHERIES MIGRATIONS IN
THE CECAF REGION (end XIX century to 1980's)***

by Jean-Pierre Chauveau

INTRODUCTION

This is an attempt to reconstruct the principal migration movements which have been documented since the end of the 19th century, on a relatively small geographical scale, which implies quite considerable distances that can be compared to present-day state borders. The global region here considered corresponds to the CECAF area.

This reconstruction is limited by the following:

- 1) the examination of historical material is far from being exhaustive;
- 2) information often ignore (or do not take into consideration) short range seasonal movements which cannot be separated from fishing practices; in general, they do not distinguish short term from long-term migrations or quasi-permanent settlement.
- 3) we do not possess quantitative data for this period;
- 4) information is biased by à-priori "strategy" related to the identification of the geographical intertwining of fishermen migrations; this networking has been fitted early on into colonial territorial limits and even today, knowledge and registration on migrations are dependent the question of borders - crossing and do not take enough account of spatial scales and units more in keeping with the fisheries logic and with economic or social history.

In spite of its limitations, this historical reconstruction may be useful in depositioning the thinking on present day migrations in the context of **larger trends** (not always linear) spanning over a century. One should thus expect to have some light thrown on the **greatly varied contexts** which have helped shape the aspects of these migrations: macro-economic situation, connections between maritime fishery with other activities(1), diversity of coastal societies and different degrees of involvement in fishing.

* Translated from French

- 1) Only maritime fishery will be treated, to the exclusion of continental, estuarian and lagoon fishery.

We will make an attempt at periodication so as to put forward some proposals during the discussion relative to different points raised by J. Haakonsen in his "Guide to the authors" which we have been unable to develop here.

The documents consulted (see bibliography) have in fact enabled us to distinguish several important periods in the fishery migrations. We will propose an interpretation of each and in conclusion, a general interpretation of the African Atlantic fishing space.

2) ATTEMPT AT PERIODIZATION

2.1 We cannot go into any detail concerning **the historical context prior to the 1880s**. However, three facts may be recalled:

2.1.1 Long before this period, the African Atlantic coastline experienced **movements of populations parallel to the coast** notably in the coastal regions subjected to pressure from inland states. For example, the coasts of present day Sierra Leone and Guinea experienced several redrawing of their ethnic landscape. Another striking example: the Gulf of Guinea coastline which extends from the Akan kingdoms (eastern Ivory Coast) to the Benin kingdom (neighbouring the Niger delta), was the theatre of coastal migrations coming first of all from the east and the hinterland, then of micro-migrations of Fanti and Ga population (from Ghana) towards the present coast of Togo and Benin. Another example of a coastal zone subjected to continuous population movements is the area comprised of the Ndongo, Kongo and Loango kingdoms between the northern coast of Angola and the southern coast of Gabon. It is certain that, in spite of the conflictual evolution it has known, **this "shared history" has produced vast and quite ancient socio-cultural spaces**. Only later were the colonial, then national, territorial limits superimposed on these generally recognized areas. However, contrary to the case of Senegal, the colonial territorialization resulted in administrative integration of coastal zones that were economically, socially and culturally different (Wolof-Lebu, Serer Niominka, Diola). **Colonization, however, never in any way interrupted the mobility of peoples and activities along the African Atlantic coastline**, especially as far as navigation and fishing are concerned. (Chauveau, 1986).

2.1.2 The general configuration of fishery migrations is linked to major transformations of the African economies, initiated, from the second quarter of the 19th century on, by the conversion of an exchange economy centred on slavery into an economy based on raw material products exportation (gum and palm oil, then groundnut, wild rubber and cocoa). In all eventualities, and as seen from the population movements and the flow of coastal exchanges (see examples given earlier), **one may situate the**

formation of "modern" fishery migrations in the second half of the 19th century concomitant with the development of petty peasant production for exportation of primary products from the interior (Chauveau, to be published). The type of fisheries migrations for which historical documentation is available, is typically associated with barter or money transactions representative of a trade economy (this not being in compatible with a logic of subsistence).

2.1.3 In the trading context, characteristic of the second half of the 19th century, fisheries, fishermen and other agents in the sector, were early on confronted with fluctuating economic conditions in space and time. For example, the evolution of different sites of maritime navigation and fishery show the diversity of situations in the coastal environment and changes (sometimes discontinuous and not linear) which affected each of them in time (Chauveau 1986 and to be published). These factors of variability in the intensity and kinds of fishery influenced, as of the 19th century, the configuration of fishery migrations (for example the phase of expansion in exchanges in the 1830-1860s, followed by the crisis in Euro-African exchanges in the 1870-1890s. The migrant fishermen have thus long experience in changing their migration sites.

2.2 Decades from 1880 to 1910.

2.2.1 Information at hand suggest the framework of contemporary fishing migrations was already formed. One may distinguish:

- 1) a migratory area stretching from Port-Etienne in Mauritania to Freetown, Sierra Leone, revolving around the Senegalese epicentre - which itself can be broken down to smaller epicentres (Guet-ndar, Lebu, Serer, Nyominka) - and a secondary Sierra Leonean spread.
- 2) an area stretching from the western Ivory Coast to the present Benin, dominated by the Ghanaian spread and its components (mainly Fanti, Ga and Anlo) (2).
- 3) a West-Central Atlantic region, from north Angola to south Gabon, with the Luanda region and the Vili coast being the predominant migration epicentres.

2.2.2 One may make certain additional observations:

- 1) certain coastal zones do not seem particularly (or only to a small degree) concerned by fishery migrations. However, one may differentiate:

- those zones which manifestly do not attract fishermen migrations such as, Liberia, Spanish Guinea (now Equatorial Guinea), Gabon. One may note that these coastal areas are sparsely populated and not very affected by the development of the "petty commodity production" taking place elsewhere.

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- 2) The small Nzima group being mainly involved in lagoon exploitation.

- the zones which have only recently begun to attract migrant fishermen: French Congo (Senegalese and Sierra Leonean on the river, Dahomeans on the sea-coast) and Cameroon (fishermen from Accra).

- the Nigerian zone, where no important fishery migrations are noted though they probably exist within the colonial borders ("state" bias). The fishermen migrations within the Nigerian coastal area seem to constitute a space of mobility in its own right. Migrations from the Gold Coast noted in the previous period, are still in progress.

2) as for back as this period, and no doubt also before, a certain number of coastal micro-regions where migrant fishermen of different origins meet, came into being. (These are generally "protected" littoral areas, where local native fishery is rarely maritime: Gambian and Guinean estuaries; Togo and Benin lagoons; lower-Congo river and estuary). This is the case in Guinea, for Lebu and Wolof fishermen from Senegal as well as Sierra Leoneans (probably Sherbro and Temne); on the coastal strip between the Volta to present-day Benin for Fanti, Ewe and Ga from present-day Ghana; in Congo, for Cabinda and Vili from Angola and the fishermen from Ouidah, Senegal and Sierra Leone.

The recovering of migratory areas of the principal maritime fishery centres thus seems to take place on zones inside or near ancient migratory areas. The expansion zones distinguished above (cf.3.1) remain individualized and separated by coastal zones little concerned by fishery migrations.

2.2.3 One may attempt to interpret the configuration of fishing migrations at the turn of the century (1880 to 1910s) through its political and economic context. At this time, the colonial apparatus was being installed, hitching onto (rather than creating) a profound economic transformation. The social structures associated with precolonial states and the "slave trade" decline, while small family exploitations spread in the hinterland, directly disposing of their production in the export sector. This period represents the end-result of reconversion phase which sees the slave trade replaced by the export of primary products. From now on, the structures of production and distribution of revenue are those that are increasingly affected. Petty commodity production spreads to an increasing number of micro-societies forced to convert themselves into the "peasant way". This causes an indisputable development of enterprises that one would qualify today as "informal".

Among these enterprises, some were most certainly concerned with maritime fishing. The areas of fishing migrations show notably how this activity combines with the general economic movement. They are centred on coastlines where economical activity is the most intense and are used as transit areas for export products from the interior. However, these migrations also

contribute to the flow of processed fish towards the colonies from when the migrants came (Sierra Leone, Togo, Nigeria and in particular present-day Ghana).

It should be noted, however that the fishery migrations often follow labor migrations along the West African coast, especially the migrations of boatmen (longshoremen, small-scale canoe or whale-boat transport), of manual labourers (especially the Kru boarding European vessels as crew or used as day labourers on land), and traders (dealers and shopkeepers). **These migrations networks worked as a support base of information, solicitations and reception guarantees for immigrant fishermen.**

2.3 Decades 1920 and 1930

The inter-war period does not show much change. Migration areas maintain their former configuration. Historical material available for this period is less informative. It suggests the contraction of migration areas, but that could be a bias in the information on such a complex period (important development of exchanges in the 20's, the crisis in the 30's, followed by a strong new start from 1937 on).

2.3.1 One may observe a **complexification of migration movements within the main migratory areas** especially in the zone between the Ivory Coast and Nigeria. This complexity is displayed by the fact that certain parts of the coast are simultaneously sending and receiving centres for migrant fishermen. From the Ivory Coast to Lagos the coast seems subjected to a true "brownian movement" of fishermen.

2.3.2 Despite the lack of quantitative data, it can be said that as a whole, this period is marked by an **intensification of fishing migrations** consecutive to the development of an exchange based economy along the coast. This intensification is concentrated within the main fishing areas where new maritime fishing techniques (castnet primarily, then beach seine and drift gill net) were already wide-spread in the past.

The economic crisis in the 30s does not seem to have affected maritime fishery activities or fishermen migrations. One might even say that the opposite occurred: the sector pertaining to production and "informal" exchanges no doubt absorbed the impact of the crisis in export products in the local coastal economies, with some help from colonial authorities (for example, the call for Ewe fishermen in Ivory Coast).

2.4 Decades 1940 and 1950

2.4.1 This period is characterized by the **tendency to recover former migration areas** especially through:

1) the extension of Senegalese migrations (Wolof and Lebu) towards the Gulf of Guinea (Ivory Coast), strengthened by the Nyominka migrations towards Portuguese Guinea.

2) the extension of Fante migrations to Liberia and Sierra Leone to the west

3) the individualization of a migratory spread on the coast stretching from the Ewe country to present-day Benin. The fishermen on this part of the coast, often former (or sons of) migrants settled in the area, to be called "Popo" later in their temporary or permanent migrations into new areas, in Liberia, Gabon or Congo.

4) migration from Nigeria to Cameroon and perhaps already towards Gabon.

2.4.2 The new configuration of fishing migrations at that time is explained by the convergency of several factors:

1) the development of coastal urban infrastructure and the ensuing demand for consumer goods (generally fresh produce)

2) the post-war resumption of peasant exports in the interior and the induced demand for consumer goods (generally processed products)

3) the appearance of new techniques favouring the mobility of fishermen and of their produce (beginning of canoe motorization, fish transport vehicles and road infrastructures).

2.5 From the 1960s to 1980s

This period is marked by the independance of most of the coastal colonies and the amplification of former trends towards the recovering of large migration areas. It does however correspond to district regional variations.

2.5.1 The important and ancient Senegalese sphere of influence displays a stabilisation, if not a regression of its migration area. The latter seems to reach its largest extension in the 1960s. But the documented fishing by Senegalese fishermen in the Gulf of Guinea mainly concerns small groups or individuals established in the host zones (Ivory Coast, Congo) or is the result of particular or temporary circumstances (Senegalo-Dahomean convention on technical assistance by Senegalese fishermen at Sémé-Plage and Ouidah). From then on, Senegalese fishing migrations to the south seem limited to Guinea. At the same time, or perhaps consequently Senegalese migrations to the north are resumed, towards Mauritania. It is probable that these latter mobilize a larger workforce than former migrations to countries in the Gulf of Guinea.

The constriction of the Senegalese migration area corresponds therefore to a geographical displacement of its locations on one hand, and on the other hand, to a heavy growth of canoe production Senegal itself, owing to canoe motorization already underway since the 50s (in 1958, 400 canoes were already motorized). Perhaps Senegal's advance in this domaine rendered distant migrations less attractive than local extension of fishing zones and internal migrations along the Senegalese coast.

Another reason for this geographical lightening of Senegalese migrations is the establishment of customs barriers or, at the least, of administrative control of foreigners, related to the independances. As a result of the dissolution of the A.O.F. and A.E.F. federations, the Senegalese stopped benefiting from previous colonial administrative protection.

Following this, outlets available to the canoe fishery in Mauritania developed (growth of Nouakchott, created in 1957, export processing plants in Nouadhibou, recent use of Senegalese canoes by the industrial fleet). The proximity of this outlet, located in a more productive fishing zone, contributed to the devalorization of the distant migrations to the south. Perhaps the latter will be given new impetus following the recent and unfortunate events between Mauritania and Senegal.

2.5.2 The Ghanaian migration pattern for its part, underwent a different evolution. Its migratory area tended to spread in spite of political measures which start being taken in the 50's against its nationals in diverse host countries (Ivory Coast, Sierra Leone, Congo, recently Nigeria and presently Liberia). The nevertheless Ghanaian fishermen's migrations (especially Fante and Ewe) extend systematically beyond Sierra Leone (Guinea, Gambia and even Senegal to the north) and regularly includes the coast from Nigeria to Congo. This area presently covers almost the whole region of West African fisheries migrations except for Mauritania which was, until recently, monopolized by Senegalese migrations.

Several elements may be put forward to explain this geographical expansion. One concerns the Ghanaian macro-economic situation as a whole, which considerably deteriorated as from the middle of the 60s. However, this argument is insufficient. Compared to the Ghanaian situation, the Senegalese one from the 70's on, is not much brighter though it does not induce an extension of migrations except towards Mauritania.

Other elements must thus be taken into consideration such as the downfall of certain Ewe coastal fisheries following the construction of the Akosombo dam on the Volta and partial reconversion to mainland fishery on the reservoir; or much stronger competition between semi-industrial and canoe fishery than in Senegal. Other factors, to be confirmed, reside in a less

favourable policy of public support to the canoe fishery than in Senegal (where semi-industrial fishery projects has always fallen through), especially with relation to motorization. Ghanaian migrations could have been reinforced by the need to acquire equipment in countries where its availability and its cost in local currency is more to their advantage. In this context, far from discouraging the fishery migrations, the political measures taken against Ghanaian fishermen in some countries, may have urged them to prospect and exploit new coastal zones.

2.5.3 Besides these two traditional migration spheres, one notices the individualization over the last 30 years of new centres of out-migration in zones that were hitherto mainly hosts to migrants. This is notably the case of the "Popo" epicentre. Although this term used *stricto-sensu*, concerns fishermen populations from a micro-region of the Benin coast, it includes Xwla, Xweda and Popo migrants from Benin, Ewes and Minas from Togo, Ghanaian Ewes and even Fante sometimes, in host countries such as Liberia, Cameroon and Congo. Many Togolese and Beninese fishermen implicated in this "Popo" sphere themselves originate from ancient foreign settlements (Anlo-Ewe in Togo, Fante and Ga in Togo and Benin).

The other noteworthy case is that of Nigerian fishermen (for example Ijaw and especially Yoruba-Ilaje) who migrate from the Cameroon to the Congo.

In both cases, one must avoid interpreting them as a brutal rupture in the geographical networking of previous migrations. Popo and Nigerian migrations prolong rather than modify a lengthy process. The "Popo" spread mainly evolves from a rearrangement of the former Ghanaian migration pattern with its Anlo-Ewe and Mina components becoming autonomous (these groups having left Ghana since a long time) and associating themselves with local Ewe elements in Togo, and Xwla and Xweda in Benin. Similarly, Nigerian fishing migrations evolve more from the extension of an old migratory area. These migrations only appear new because they cross the eastern Nigerian border and now extend towards the coast of West-Central Africa.

Nowadays, the coast stretching from Cameroon to the Congo appears as a host zone to migrants of various origins, like the former "Slave Coast" at the beginning of the century; the latter having become an autonomous center of out-migrations.

In this zone however, Ghanaians, "Popo" and Nigerians do not always seem to migrate together. In any one zone, one element is accepted (or encouraged) to the detriment of the other, depending on circumstances yet to be determined (for example the implantation of Nigerian fishermen and the departure of the "Popo" in Gabon, "Popo" migrations and the departure of the Ghanaians in the Congo).

3. GENERAL INTERPRETATION: THE AFRICAN ATLANTIC COAST AS A SPATIAL SYSTEM.

3.1 Generalities.

The evolution of migration areas over the last century emphasizes a number of discriminative features. These features remain present in contemporary fishery migrations in the zone known as CECAF.

A remarkable result stemming from the analysis of this long period is that, by the end of the 19th century, **canoe fishermen migrations take place at the scale of the entire African Atlantic coast.** It forms a global system within which the combination of bio-environmental and socio-economic conditions give form to historical configurations of organized and fluctuating migration expanses.

3.1 From the view point of **bio-environmental conditions**, it is certainly not by accident that the oldest known migration areas of a certain scale are **located in upwelling zones** (Senegalo-Mauritanian, Ivoire-Ghanaian, Benguela current). Between such areas, the coasts are mainly occupied by estuarine, lacustral and lagoon systems: maritime fishery is subjected to strong competition from the brackish water fishery, local needs being met mainly by the latter (CHAUVEAU, to be published).

The migration "system" linking the entire Atlantic coast is built around the oldest patterns whose main activity seems to be the exploitation of areas situated near a particular upwelling. Generally, these areas are little exploited by coastal populations, who are more orientated towards the exploitation of paralic environments (Ivory Coast, "southern rivers" in Senegal, Gabon) which facilitates the local implantation of migrants. In addition, periodical movements of fishermen within a particular upwelling zone are adapted and adaptable to the seasonal movements of certain species, notably coastal pelagic species. The latter form the main part of commercialized production (in terms of volume), whether it is disposed of on the spot or, as processed goods, in the migrants' regions of origin.

Other indications of bio-environmental determinants are obtained through the case of a secondary migratory patterns such as those of Sierra Leone or the new "Popo" and Nigerian migrations. They stem essentially from non-upwelling zones and are targeted towards weakly exploited upwelling zones at least in terms of commercialization.

However, the explanation of fishery migrations by mere bio-ecological considerations are insufficient to explain all typical cases.

3.2 The variability of socio-economic conditions (in time and in space) must be considered in order to interpret the installation and structuration of the migration system that unites the entire Atlantic coastline, through migration networks and seasonal camps.

1) First of all, the oldest documented migration spheres also correspond to those zone early involved in "petty commodity production" as the dominant economic form. It is within these ancient epicentres, especially in Senegal and Ghana, that maritime canoe fishery first developed, in the shadow of the "informal sector" of the time (the colonial policies long ignored canoe fishery when planning development programmes).

2) Secondly, the very strong expansion of Senegalese and Ghanaian migrations, inside or between upwelling zones, closely follows the evolution of the global economic context of the Atlantic coast. By the middle of the 19th century, as we have seen, fishing migrations follow the previous implantations of migrants of the same origin involved in sectors connected to merchant economy; shopkeepers, rubber dealers, workers planters, long-shoremen, boatmen, transporters... Thereafter, it is the intensification of this trading activity and the parallel development of a local monetary economy which shapes areas of migration. The Senegalese and Ghanaian expansions follow the geographical lines of this intensification, firstly within a definite upwelling zone, then over the entire littoral system. On the other hand, the Angolo-Cabindan spread practically died out, owing to colonial policies in that region (notably systematic immigration of Portuguese artisan-fishermen to Angola), then to political circumstances (war of liberation, civil war).

3) Each migratory network thus remains subjected to specific "impulses" corresponding to a number of variables. But one must also emphasize the important relationships among migratory areas which influence local outlet conditions. From this point of view, the partial recovering of migration areas should be interpreted as an articulation of socio-economic networks whose regulation over time, are done at the scale of the entire Atlantic coast. An example is the comparison of the expansion and contraction rythms of the different migratory areas according to such relative conditions as the abundance of the resource, shared access to it, fluctuation and local economic conditions.

4) We can here only underline, without being able to give a description, the importance of the part played by continental fishermen's migrations in the evolution of coastal fishing (especially Nyominka from Saloum, Somono, Bozo, Subalbe). Migrations of the latter towards the coastal fishery or paralic "milieus" are non-negligeable elements in the analysis of the maritime spatial system, notably, because of their technological

effect.

5) The articulation of fishing and fishermen's migrations to the global socio-economic networks generally takes place through **intersectoral contacts which precede or accompany migrations**. In particular :

- **relations between fishing and agriculture**. It can be put forward as an hypothesis that distant fishing migrations, as we know them, are linked to the development of "commodity production" within the framework of peasant economies. The specialization of certain migration patterns, old or new, is not a logical nor a linear consequence of the development of local fisheries but the result of a necessary reconversion (see conclusion) 4.1).

- Fishing migrations require the **organization of various local systems** of supply, commerce, processing (and eventually, of re-exportation of the processed product) as well as the institutionalization of relationships with local coastal populations. As much as the organization of fishermen migrations themselves, the interprofessional and interethnic set-up (often the result of overland migration) determines the regulation of the migratory system's, at the scale of the Atlantic coast access to means of production kinds of migration, socio-cultural and economical aspects, conflicts and settlements.

- **the relations between artisanal and industrial (or semi-industrial) fisheries**. It is not possible to go into any detail here on this little-known subject. One may point out that these relations differ from one zone to another and it is precisely this difference that influences the migratory structure on the entire coastline (for example, comparing the importance of Ghanaian, and perhaps Nigerian, semi-industrial fisheries to that of the Senegalese situation; or the importance of Canarian artisanal fishermen in Mauritania or of the Portuguese in Angola).

4. **CONCLUSION**: MARINE FISHERY SPACE, ECONOMIC CONDITIONS AND POLITICAL TERRITORIALIZATION.

4.1 **Genesis of distant and durable migrations.**

As of the beginning of the century, the Atlantic coastline from Senegal to the Congo, was most likely seen as an ensemble of organized fishing areas. **Certain groups at least, possessed the necessary information to perceive it as such**. These groups mainly Senegalese and Ghanaian) had a double edge both from the fishery and economic stand-points.

As far as fishing is concerned, these groups originated in coastal regions subjected to upwelling effects, which had two important consequences. Firstly, the presence of an abundant fish

supply was a boost to fishing (when other socio-economic conditions were met, as we have already seen). Next, it is very probable that the movements of abundant species, determined by the upwelling conditions in these zones, had long since induced the fishermen to seasonal movements, giving them experience in migration and allowing them see their economic and social advantages.(3)

From the economic point of view, the groups first engaged in the most distant and lengthiest migrations were also the earliest groups to be integrated in petty commodity production whose driving force was the export of farm produce.(4) In almost all important cases, these groups were furthermore obliged to specialize in fishing owing to a number of constraints. These could have been of different sorts: relatively poor availability of agricultural resources (case of coastal Fante), early break with agricultural activities and poor access to land tenure (Get-ndar, Lebu from Cap-Vert, Ga from the Accra at a time of growing urbanization, Fante of the ancient and most important European trading ports), worsening of agricultural conditions associated with important population growth (Ghana Ewe, Mina and Popo from Togo and Benin) or with particular problems (availability of drinking water in the case of the Nyominka).

Generally speaking, the hypothesis put forth by Jorion (1988) on the emergence of specialized maritime fishery, is hereby reinforced: distant or durable migrations correspond to a high degree of specialization in fishing (with regards to rainy season farming in particular) and this specialization is less the

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- 3) Although biologists do not agree on this subject, one may consider that the movements of fish are determined by the search for food rather than programmed "migratory" behaviour. In upwelling zones (Stretta, 1989 and Stretta et al. under print), this search is conditioned by the intensity and form of the upwelling phenomenon, subjected to interannual variations. A useful orientation for research would be the study of fishermen's knowledge, not only of the biology of the species, but also the environmental changes that condition their movements. Perhaps this local knowledge will enable us to explain the morphological differences existing between, on one hand, migrations in the Senegalo-Mauritanian and Angolan-Cabindan upwelling zone (long distance migration with a dominant orientation) and that of the Ivoir-Ghanaian upwelling (more complicated and multi-directional migrations)?
 - 4) Let us remember that the genesis origin of long distance and durable migrations is associated with the pre-existence of migratory networks not concerned with fishery, that encouraged them and guaranteed the reception given to migrant fishermen.

result of a deliberate choice on the fishermen's part than a strategy of reconversion from agriculture. Only when the risks involved in farming can no longer be dealt with, does fishing take over and encourage regular migrations, along with all that is implied with respect to the social organization of fishermen communities (relationships among age classes, men and women, villages).

4.2 The history of fishery migrations has to consider the Atlantic coast as a virtual ensemble of patterns and networks conceived as such by groups of fishermen which put themselves in a position to explore, identify and update it. The updating of this inclusive fishing spatial "system" is the result of fishermen's perception of the **fluctuating combination of bio-ecological, economic and political factors**. The constraints listed above in order to explain the specialisations and the migrations in marine fisheries do not exclude the possibility of **strategic choice** of fishing and migration.

1) **From the bio-ecological stand point**, the history of these migrations seems to show that the Atlantic fishing space is perceived as being composed of specific fishing zone, discrete but nevertheless related to each other. One may call it a continuum of marine "technotopes", by analogy with the organization of the continental fishery space (Fay 1989). A "technotope" is the combination of a place and a particular fishing technique, for a given period of the biological cycle of the fish and of the ecological cycle of the milieu. The coastal space is thus seen as the space-time interlocking of "technotopes", offering the double possibility of **mobility between localized technotopes**, on one hand, and of **coexistence of different technotopes within a same geographical fishing zone**, on the other. In this perspective, more explicit studies would specify the bio-ecological condition of specialization not only between migrant and non-migrant fishermen but among migrant fishermen as well (for example, among Ga, Fante and Ewe; Wolof, Lebou and Nyominka, or Ewe, "Mina" and "Popo"). The question of specialization in terms of technotopes, with the added intervention of places and periods, is not thoroughly answered by specialization in one particular technique (line, beach seine, sea nets, for instance) which is but a particular aspect of diversified technotope exploitation.

2) **On the economic level**, the history of migration seems to show that exploitation of the Atlantic fishing space is heavily determined by changes in the global economic context since the 19th century and the sources of variability of this context in time and space. The actualization of the fishing space, seen as a

virtually inclusive system, depends on these variations. They explain the linking of technotopes with particular economic spaces through fishery migrations (extension, regression or the appearance of migration spreads considered in relation to one another)(5).

3) It is clear from the start that recognition, perception and actualization of this fishing space have been shaped by **factors that may be termed as "political"**. The history of the peopling of the Atlantic coast and the settling of coastal communities, followed by the implementation of colonial administrative and economic infrastructures, particularly shaped the system and explain the setting-up and the fluctuations of fishing migrations within it.

It is also clear from the start that the **superposition of spaces founded on the logic of fishing** ("technotopes", from the production viewpoint), the logic of **"petty commodity production"** (viewpoint of outlets) and the logic of **political territorialization** (considering the colonial territories, then the independent states) is still in place and active today. **Fishing migrations are sustained by the complexity of this system and remain largely subjected to its resulting contingency.** Any thought given to the state and the management of the migration system must integrate these different elements and consequently take into account the partial nature of the sole state or national logic. It should be remembered that the recording of fishery migrations is subjected to considerable bias owing to the pre-eminence of political or state logic in the domain of research and planning. Fishing migrations are made to appear or disappear arbitrarily according to whether or not borders are crossed. Migrations similar in nature from the viewpoint of fishing, are made to appear different because of their political connotations.

One must emphasize here the importance of circumstantial measures - political in nature or justified by purely national economic considerations - for fishing migrations. Already obvious in precolonial and colonial times(6) their impact remains strong whatever their arbitrary character, from the standpoint of the

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- 5) In the same way, and over a longer period, the main sites of maritime fishery are determined by differential economic conditions over the entire coastline (Chauveau, to be published).
 - 6) For example, the troubles related to the antagonism between European nations and between the Ashante and the coastal states on the Gold Coast, suspicion with regards to the English in French colonies, territorial fiscal systems, the anti-colonial war situation in Guinea Bissau (which directed a network of fishwomen towards Casamance) and in Angola.

fisheries logic(7). Similarly, the difference existing in economic or fishing equipment supply policies triggers true "supply migrations"(8) of foreign fishermen, (notably towards Gambia and Togo) and stimulates the association of fishing migrations to speculative activities on consumer produces. On many points, this general overview needs to be specified and corrected by more detailed research (as is done by other contributions to this round-table). It is however useful in showing what present migrations owe to a long history as well as the permanency of decisive factors which must be known and adressed by national policies.

7) For example, the expulsions of Ghanaian fishermen from several countries, the Biafran war, the closing-down of borders between Ghana and Nigeria or between Ghana and Togo, the shutting-down of shipping lines between Guinea and Ghana, the present situation in Liberia, etc...

TABLEAU RECAPITULATIF DES FACTEURS D'EVOLUTION
DES PRINCIPAUX FOYERS AUTOCHTONES DE PECHE MARITIME
DANS LA LONGUE PERIODE

Pays	Principales ethnies concernées par la pêche maritime	Facteurs d'abondance de la ressource		Non concurrence d'un réseau paralique	Indicateurs socio-économiques dans la longue période				Foyer ancien de pêche maritime	Indicateurs de l'évolution de la pêche maritime dans la longue période				
		(1)	(2)		(3)	(4)	(5)	(6)		(7)	(8)	(9)	(10)	(11)
Mauritanie	Imragen	++	+	+	pas d'agric.	--	--	--	+	+	↗	--	+	(dont Canariens)
Sénégal	Wolof	++	-	+	++	+	+	--	+	+	↗	++	+	+
	Lebu	++	++	+	+	++	+	--	+	+	↗	++	+	+
Guinée Bissau	Niominka	++	++	-	+	+	+	--	+	+	↗	++	+	+
	Bijogo	++	++	+	+	+	--	--	?	--	↗	++	+	(dont Portugais)
Sierra Leone	Sherbro	++	++	+	+	+	--	--	+	+	↗	--	+	+
	Bolom	-	+	-	-	++	+	+	--	--	↗	+	+	+
Libéria	Kru	-	-	+	--	--	--	+	--	--	↗	+	+	+
Côte d'Ivoire	Aladian	+	-	-	--	+	++	++	+	+	↗	--	++	++
	Fanti	+	+	+	--	++	++	++	+	+	↗	++	++	+
Ghana	Ga	+	-	+	-	++	++	++	+	+	↗	++	++	+
	Ewe	+	-	-	--	++	++	++	+	+	↗	++	++	+
Ghana-Togo	Mina-Popo	-	-	-	--	++	++	++	+	+	↗	++	++	+
	Yoruba et ethnies du delta du Niger	-	+	-	--	++	++	++	+	+	↗	+	+	+
Nigéria														
Gabon-Congo	Vili	++	+	-	--	--	--	+	--	--	↗	+	+	+
Angola	?	++	+	+	++	++	++	++	+	+	↗	++	++	(Portugais)

(1) Upwelling

(2) Largeur du plateau continental

(3) Sensibilité de l'agriculture au climat

(4) Densité démographique

(5) Importance de l'économie d'échange

(6) Importance des importations de poisson

(7) Importance des exportations de poisson

(8) Importance de la pêche industrielle

(9) En expansion (↗), en régression ou marginal (↘)

(10) Foyer de migration de pêche

(11) Zone d'accueil de migration de pêcheurs-artisans

Map 1. Ecological environment and location of the principal patterns of marine fisheries from the 15th century to the present time



Upwelling zone
 Strong surf
 Estuary network
 Lagoon network

Old maritime fishing range in expansion
 Old maritime fishing range in decline
 Recent maritime fishing range in expansion

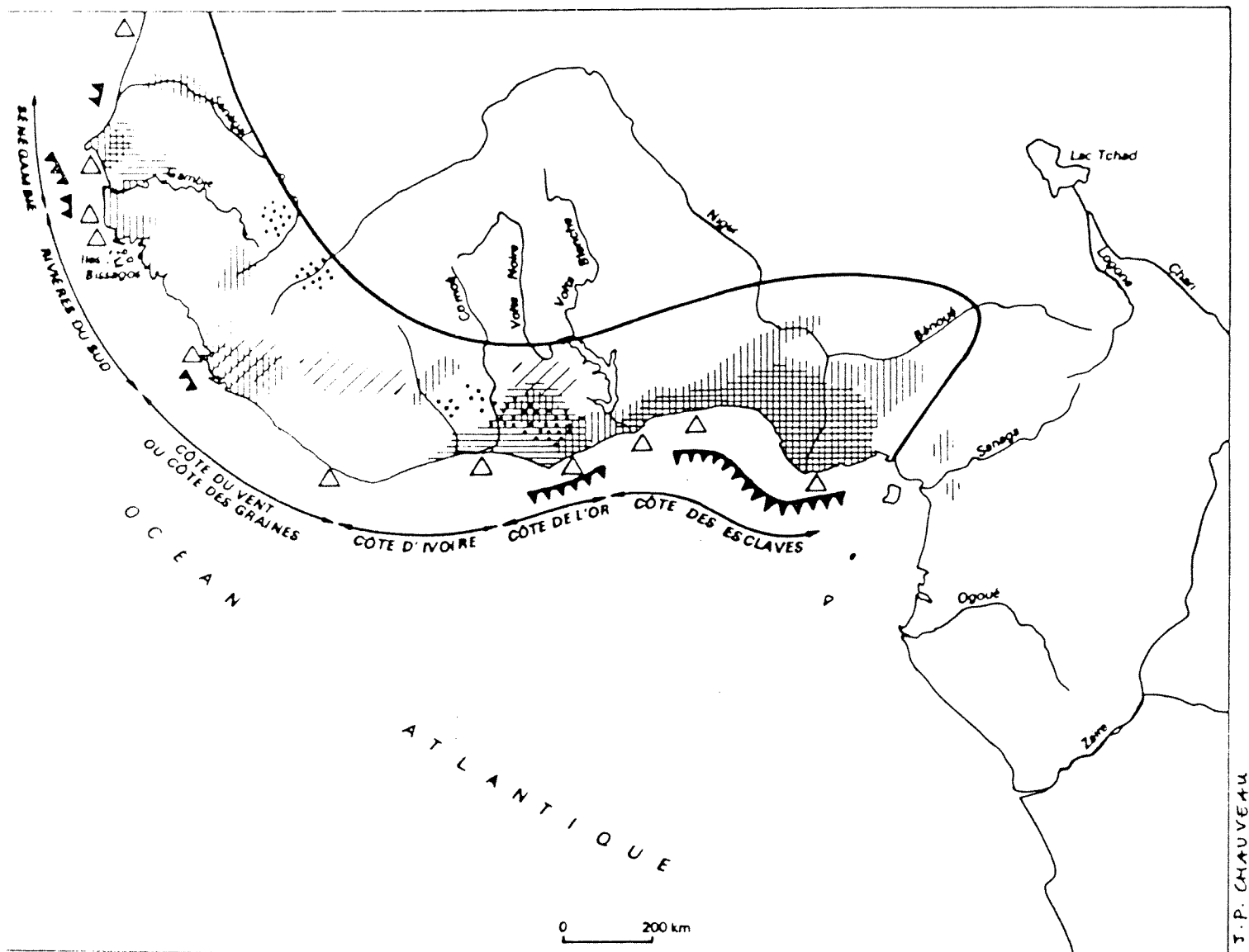
Limit of agro-climatic zones
 (Source : ILTA report 1984)

(1) Permanent pastures
 (2) Precarious agriculture
 (3) Very drought sensitive agriculture
 (4) Moderately drought sensitive agr.
 (5) Slightly drought sensitive agr.

1. Wolof
 2. Lebu
 3. Niominka
 4. Bijagos Islanders
 5. Bulom and Sherbro
 6. Kru

7. Aladian
 8. Fant
 9. Ga
 10. Ewe
 11. Popoh and Mina
 12. Vili

Map 2. Principal economic areas of the coastal hinterland



J. P. CHAUVEAU

△ Main salt producing zone

||||| Population density more than 20p/km² in the middle of the 20th century (from Sénégal to Angola)

==== Areas where small peasant merchandise production is important as of the middle of the 19th century

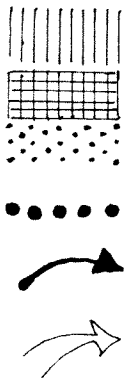
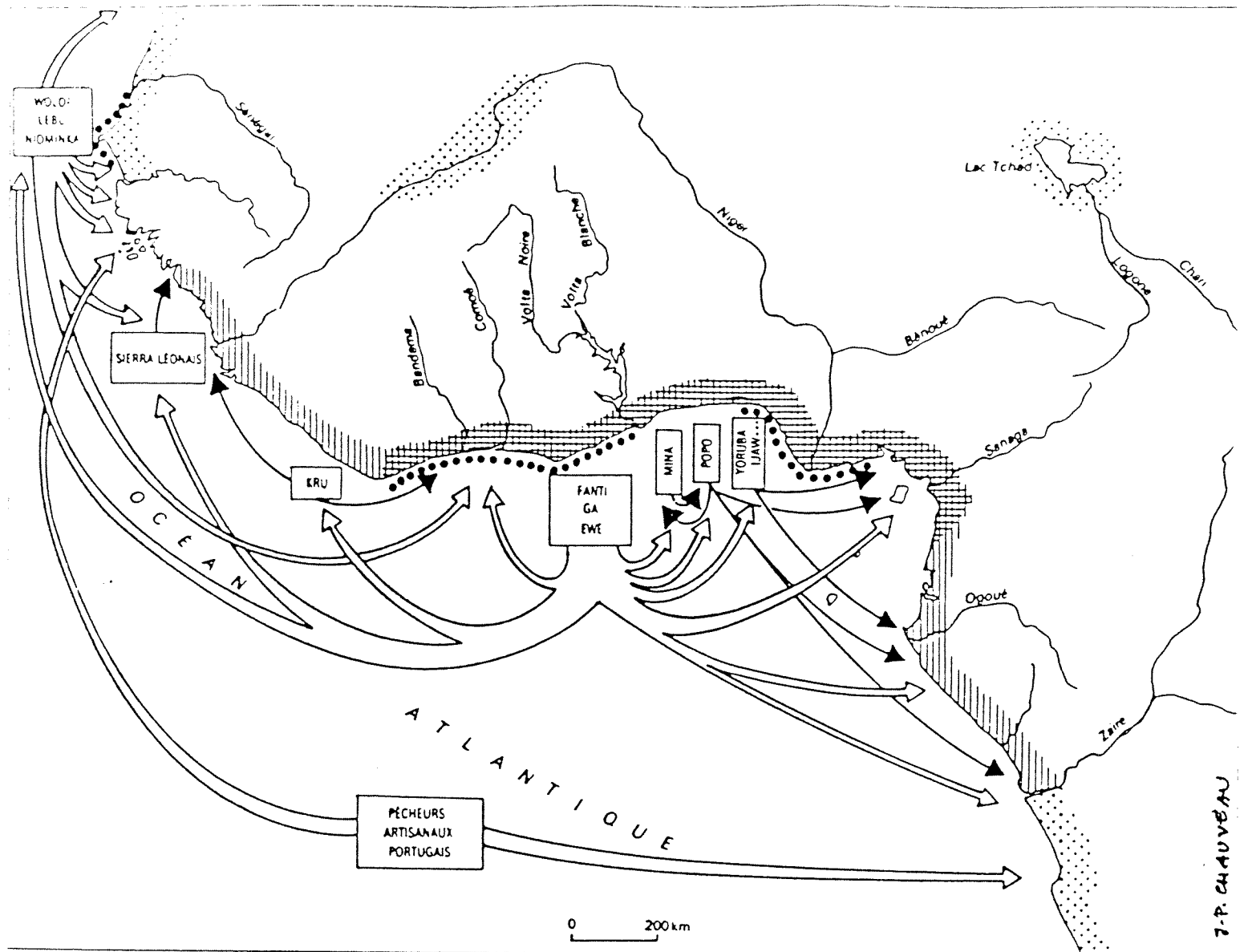
⋮⋮⋮ Regions of intensive gold-washing (19th century)

//// Kola-nut exporting regions

▬ Principal areas of coastal trade and commerce since the 16th century

— Limits of the area taken into particular consideration.

Map 3. Principal flows relevant to marine fisheries (20th century)



Traditional fish importing countries

Countries traditionally importing great quantities of fish

Countries traditionally exporting fish to other African countries

Countries which experienced a policy of industrialization of the fisheries in the 1960's.

Important canoe-fisheries migrations

Principal canoe-fisheries migrations (the arrows indicating the directions of migrations are not proportional to the volume of migration).

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SOME ASPECTS OF FISHERMEN'S MIGRATIONS IN THE ARTISANAL
MARITIME SECTOR OF MAURITANIA*

by

Hamady Diop and Ismaïla Thiam

Abstract

Fishing has been a subsistence activity in Mauritania from the fifteenth century to independence in 1960. It is only then that coastal settlements of artisanal fisher operating within a market economy are brought to notice. Migration flows involving foreign fishermen have contributed to the overall development of the industry through the introduction of new technologies (gear, craft) and new forms of organization. These migrant fishermen (Mauritanian as well as foreigners), mostly Wolof, make up the bulk of the fishing population operating along the coastline. Their activities are complementary to those of Imraguen fishermen who happen to exploit different fish species.

1. Introduction

Small-scale maritime fishing in Mauritania was retained as one of the priority sectors to be developed in 1987 in the government's "Declaration de Politique de Développement du Secteur de la Pêche". This activity represented 5,4 % of the quantity landed in 1988 and employed more than 3 500 fishermen, who do not always work in their native region. This migratory phenomenon along the Mauritanian coast, its reasons, the socio-cultural aspects, micro and macro economical implications etc., will be studied here.

2. Historical overview

Settlements along the Mauritania coast were first observed in the 15th century (Arnaud 1977). These were foreign trading stations : Arguin to the north and Portendick in the centre. These establishments influenced the itineraries traced by Moorish traders, though they cannot truly be considered as an occupation of the coast nor as a native maritime economy. Lack of fresh water and difficult access to the unsheltered Mauritanian coast slowed down development of the area by colonialism. This explains the limited influence of colonial activities on the native population. Trotignon (1981) has divided the coast according to the populations which settled there, as follows :

* Translated from French

- the Trarza coast from N'diogo to Point Thilla
- the Barikalla coast on the banks of Saint Jean Bay
- Oulad Bou Seba, from Rgueibet Thilla to Cap d'Arguin
- the El Grâ coast and Oulad Delin to the north of Cap d'Arguin

Upon independence (1960), only two traditional centres of coastal occupation that have not prospered much since were observed : the Imraguen (*) fishermen to the north of Cape Timiris and the Wolof farming fishermen in the river delta in the south of the country. A gradual change from agriculture to fishing has continued in recent years.

Apart from these two sedentary groups, the coast is occasionally reached by a few nomades leading their flocks to a cure of "salt pastures" or for a modest exploitation of salt in the coastal "sebkhas".

As of 1958, a few things changed ; worksites became operational in Nouakchott and Nouadhibou, causing a migratory movement towards the formerly deserted coastal area whose resources and possibilities suddenly become apparent.

3. Origins of migrant fishermen

Migratory movements of fishermen in Mauritania have mainly concerned Mauritaniens over the last year (since 1989) and have solely been internal. The ethnic groups of fishermen touched by this phenomenon are Wolofs native to N'diogo, Subalbé "Pular" from the river basin, Imraguen fishermen dependent upon the Barikalla, Ebel Bouhoubeyni, Oulad Abdoul Wahid and Oulad Ben Seba. However, the presence of foreign fishermen has also been noted. These are Bambara and Soninké, natives of Mali, Wolofs from the Gambia, Peulhs and Balantas from Guinea-Bissau. There are also some Coreans carrying out artisanal fishing in Nouadhibou. Some foreign fishermen own craft acquired locally. Only the N'guet N'dar (Senegal) fishermen used to come to Mauritania with their production units. The type of craft observed are wooden and plastic canoes, wooden and plastic motor boats, wooden and plastic launches and sailboats. The wooden canoes are mainly used by the Wolof fishermen. The Imraguen use sailboats and small plastic craft.

* Imraguen is the plural form of Amrig and therefore does not take an "s".

4. Description of the production units

4.1. Fishing craft*

Known as the "simple pirogue", the wooden canoe is a craft of variable length, between 7 and 18 metres (Chaboud et al., 1988). The bottom of the canoe, or "keel" is fashioned from a tree trunk or a beam (Weber 1980). Planks form the sides. The vessel has an opening in the keel at the back for the motor and is made watertight with wide bands of tarred material. It is divided into several compartments and can hold a crew of 3 to 4 fishermen. Motor included, the price is 500 000 ouguiyas (UM) on the average**.

As far as the plastic canoe, is concerned, it varies between 10 and 12 metres. Made in one piece with a keel tapering up to form the sides and forming a 1,20 m deep hollow structure, it is divided into several compartments. Motor included, the price is estimated at 1 500 000 UM.

The plastic motor boats are characterized by their length which varies between 9 and 12 metres. The hull and outsides are made of polyester resin reinforced with fibreglass. There are several compartments, one of which is the cabin and another the hold insulated with polymethane foam so as to maintain a constant temperature. These craft carry on average 4 to 6 persons. The average buying price, motor included, is 4 500 000 UM.

The wooden motor boats are hand-crafted, between 7 and 11 metres in length. They carry up to 5 fishermen on average. Several partitions divide and reinforce the hull. These boats are imported from Spain. Their average buying price, motor included, is 3 000 000 UM.

The plastic canoes are between 8 and 10 meters long with a crew of 4 to 5 fishermen. They are made up of a small fore-area in which there is a bailing device and an area aft with the rudder and other compartments. Motor included, the price is 1 000 000 UM.

The launch is a traditional wooden sailboat in the shape of a canoe. It originated in the Canary Islands and measures 6 to 9 metres. It is equipped with a latin type sail and is very old.

* Results of socio-economic research on octopus fishing in 1988 in Nouadhibou

** 82 ouguiyas (UM) = 1 dollar US (\$)

All the craft investigated are motorised excepting the launch. The engine power installed varies from 25 to 40 hp. These motors are of different trade-marks. Nearly 58 % of them are YAMAHA's. We also come across other brands such as SOLE DIESEL, RUGGERINI, PERKINS, MARINER, ARAMIS. The buying price of the motors is included in that of the craft as they are usually acquired together.

4.2. Fishing gear

The fishing gear used are numerous and varied (see table 7). In zones 1 and 2 (figure 1), set nets for fish and lobster, followed by handlines are the main gear. In zone 3 we find "shoulder" nets (filet épaule) used in the mullet fishing campaign and gill nets used to fish the scianidae. In zone 4, in addition to the gear listed above, it is particularly pots for octopus trapping that are being used.

5. Systems of exploitation (organization of the fishermen)

These systems vary from one fishing community to another : In their great majority, Wolof fishermen rely upon a family-based exploitation system, one person being responsible for decision-making. This latter is usually the head of the family who very often also owns the means of production. He is the one who manages proceeds from the sales, sets family priorities as well as the obligations of each fishermen with regards to the family as a whole. Fishermen using a wage system can only be found in Nouadhibou. This exception is explained by the facilities developed there (freezing and storage infrastructures) giving the fishermen a certain freedom of choice as to the disposal of their catch to their economic advantage ; octopus is the main species caught (6 000 \$ US per ton in February 1989).

Share systems vary according to fishing types. Generally, the amount remaining after deduction of running costs incurred in common by owner and crew (fuel, maintenance, food, tea, cigarettes) is shared under terms that vary according to the type of fishing practiced (Chaboud et al. 1988).

In the Wolof community :

- The product of handline fishing is shared out equally ; that is, one share per fisherman, one for the canoe and one for the motor.
- Proceeds from purse seines are divided up as follows : 1/3 for the owner and the remaining 2/3 being equally divided among the fishermen, the canoe and the motor.

- As for the set nets, there is no standard system. Fishermen often receive a bonus. One or more shares are allocated to the motors and canoes according to their size or number.

Imraguen and foreign fishermen use sharing systems similar to those of the Wolofs.

6. Types of migration

Mauritanian fishermen, unlike other fishermen of the sub-region, benefit from extremely rich fishing grounds, which explains the absence of a migratory flow from the country. The main kind of migration carried out in Mauritania is internal. This phenomenon is to be found along a 500 km coastal strip stretching from N'diogo village (extreme south of the country) to Nouadhibou in the north. This coastal strip is very rich, in fish and in other species, some of which are particularly valued (lobster and octopus). It is therefore quite normal for the Mauritanian coast to attract an increasing number of native and foreign fishermen. The foreign community used to be dominated by Wolofs from Senegal, but there are also others from Mali, Guinea-Bissau and the Gambia.

Fishermen's migrations tend to follow that of the species sought after (octopus, lobster, scianidae, mullet, etc.). Table 7 shows as the different types of fishing practiced, the gear used, the main species and their fishing period, the different craft used, the zones of activity and the different ethnic groups concerned. In February 1989, 48 % of foreign fishermen found on the Mauritanian coast were Wolofs from Senegal (table 4). Those from N'diogo only represented 36 % of the migrants.

As a result of the events between Mauritania and Senegal in April 1989 the structure of migrations in Mauritania has undergone profound changes. More and more Mauritians leave the interior for the coast. These latter represented 12 % of migrating fishermen in February 1989 compared to 45 % of the entire migratory flow in August of the same year, an increase of nearly 33 %. This increase is explained by the reinsertion of many Mauritians repatriated from Senegal. N'diogo fishermen who formed the main body of Mauritanian migrants increased to 50 % of the total. This rise is in itself relative to the fact that foreign fishermen left the country in great numbers.

The main concentrations of migrant fishermen are found in Nouakchott and Nouadhibou (tables 1, 2 and 3, figures 2, 8 and 4). This important body of migrants (nearly 90 % of the total) is explained by the better utilization of the work force in those areas.

7. Socio-cultural aspects

Two types of migration used to be found in Mauritania :

- the migration of foreign fishermen, from their country to Mauritania
- the migration of Mauritanian fishermen along their own coastline.

Wolof fishermen, whether foreign or native live in a community setting with a head of family managing all their possessions. This fishing society is subject to the cast system (*) which distinguishes between "free-men" and those of lower cast, which in turn influences the different socio-cultural relationships within the community, including marriages. Fishermen are shown proper respect as they are "free-men".

The tribute-paying Imraguen fishermen belong to a servile cast which constitutes, along with the many "servants" in the interior and the different socio-professional groups (N'madi, blacksmiths), the bottom of the social ladder in Mauritania (Trotignon 1981). According to this author, the Imraguen pay a tribute to their "masters". The latter exercise a major influence on the fishermen who see them as respected spiritual leaders on whom they endow all powers. The Imraguen community is entirely based on fishing. Anyone carrying out this activity is recognised as a fisherman. This means that there are no social differentiation within the community. Authority is entrusted to a village head man, chosen among the least servile, and the elders (Trotignon op. cit.). This headman advises, judges in case of disputes and settles all vital details within the community. This does not, however, give him the authority nor the prestige of the master. The Imraguen rarely migrate with their families.

8. Micro-economic effects

The infrastructures for handling and commercializing sea products found in Nouakchott and Nouadhibou help the development of small-scale fisheries which attract more and more fishermen. Difficulties in obtaining foreign currency do not seem to deter

* By "cast" one means hermetic social classes, based on blood ties, social hierarchy, professional specialization (Dieudonné 1989).

foreign fishermen. Upon the departure to their own country they buy products (cloth, food products, tomatoes, tea, etc.) much sought after at home to be sold when they return. Foreign currency is obtained both through the banks (a specified amount) and on the black market. The well-known system of solidarity ruling African families is instrumental in fulfilling obligations which remain unchanged. For some foreigners, migration to Mauritania is merely a means of making money from fishing in order to go to Europe. Nouadhibou is less than one hour from the Canary Islands by air.

9. Macro-economic effects

The small-scale fishing fleet on the Mauritanian coast fell from 770 units in February 1989 to 540 in August of the same year, then rose again to 726 in February 1990. Migrating craft represented respectively 80 %, 70 % and 81 % of these numbers. A study carried out by the "Cellule Economique d'Appui" at the Mauritanian "Ministère des Pêches et de l'Economie Maritime" (CEAMP/MPÉM) in 1987 presented the economic performance of the small-scale fishery sub-sector in terms of added value (creation of wealth), including importations and the secondary effects on employment. For the small-scale fisheries as a whole, one ton landed accounted for 37 000 UM of added value, 13 000 UM in importation (foreign currency cost) and 7 times the jobs created by the refrigerated trawlers.

10. Technological impact of the migrant fishermen

Up until 1989 (March-April) the fishermen migrating within Mauritania were mainly Wolofs from N'diogo (Mauritania) or from Senegal. In an effort to make their fortune, they travel up and down the coastline all year long, returning home only for feast days -Tabaski ("lamb feast"), Korité (end of fasting), and Maouloud (Prophet's birth). Even the Imraguen, renowned for being withdrawn and only migrating within their own area, can now be seen in the north (Nouadhibou).

The mingling of these fishermen from diverse horizons is beneficial to cultural, technical and technological exchanges. Foreign fishermen have largely contributed to the development of small-scale fisheries in Mauritania. Migrants from other countries, particularly from Senegal, have introduced new fishing gear such as the purse seine. These nets play a large part in providing fresh fish to the populations of the interior. Only the Imraguen remain faithful to the traditional yellow mullet fishing by means of "shoulder-nets", and to scianidae fishing with gill nets. Canary Islanders have introduced the Imraguen to the sail "launch" allowing them to fish on the shallows of the Arguin Bank. These craft are gradually being discarded for plastic craft. The use of wooden craft was spread by the Wolof

fishermen. In the Wolof community in Noaukchott, as well as in Nouadhibou, the differences between fishermen at the landing sites are noticeable. They do not frequent the same hangars, nor do they moor their craft in the same places.

Conclusion

Mauritania's great ichthyological resources make the country particularly attractive to migrant fishermen. Examination of information at our disposal allows us to conclude that migrants form the major part of the fishing force in Mauritania. These fishermen are of different origins. The most common migrations in recent times are internal, concerning Mauritanian fishermen travelling from their home to other sites within the country. The largest concentrations are to be found in Nouakchott and Nouadhibou, where facilities allow for easy disposal of the product. These migrations are of great importance to the Mauritanian economy, providing a readily available workforce and know-how at certain landing sites such as Nouakchott and Nouadhibou, that has an immediate effect on the local markets, supplying them with fresh fish, with the exception of Nouadhibou, where all the catch landed is bought up by the fishing industries. The complexity of artisanal fishing and the importance given to it by the Mauritanian government in its April 1987 policy declaration for fisheries development requires regular monitoring of this activity. The sector's development must be favoured considering its socio-economic effects : increased wealth and job creation.

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Table 1 : Number of migrant fishermen according to origin
(frame - survey, February 1989)

Lieux	N'diogo	Nouadhibou	Imraguen	Fleuve	A.RIM	A.Pays	St-Louis	A.Séné	Total	%
La Guerra	8	18		72		3	4	26	131	4
Nouadhibou	369		13		339	29	574	72	1396	47
Tiwlitt	75						8		83	3
Lemcid	25						6		31	1
Blavakh	13						43		56	2
Léhféré	9						40		49	2
Nouakchott	523			3	8		614	6	1154	39
Pk 28	39						5		44	1
Pk 65							26		26	1
Total	1061	13	13	75	347	32	1320	104	2970	100
%	36	1	0	3	12	1	44	4	100	

(source CNROP)

Table 2 : Number of migrant fishermen according to origin
(frame - survey, August 1989)

Lieux	N'diogo	Nouadhibou	Imraguen	Fleuve	A.RIM	A.Pays	St-Louis	A.Séné	Total	%
La Guerra	32			43	50				125	7
Nouadhibou	249		8	18	659	22			956	56
Tiwlitt									0	0
Lemcid									0	0
Blavakh									0	0
Léhféré									0	0
Nouakchott	511				48				559	33
Pk 28	56								56	3
Pk 65									0	0
Total	848	0	8	61	757	22	0	0	1696	100
%	50	0	0	4	45	1	0	0	100	

(source CNROP)

Table 3 : Number of migrant fishermen according to origin
(frame - survey, February 1990)

Lieux	N'diogo	Nouadhibou	Imraguen	Fleuve	A.RIM	A.Pays	St-Louis	A.Séné	Total	%
La Guerra	4	1		9	21				35	1
Nouadhibou	304			42	1226	92			1664	56
RGuelibet					13				13	0
Auguedj					3				3	0
Tiwlitt	53								53	2
Lemcid									0	0
Blavakh	47				7				54	2
Léhféré	5								5	0
Nouakchott	749			67	187	106			1109	37
Pk 28	34								34	1
Pk 65									0	0
Total	1196	1	0	118	1457	198	0	0	2970	100
%	40	0	0	4	49	7	0	0	100	

(source CNROP)

Table 4 : Number of migrating vessels according to origin of owners
(frame - survey, February 1989)

Lieux	N'diago	Nouadhibou	Imraguen	Fleuve	A.RIM	A.Pays	St-Louis	A.Séné.	Total	%
La Guerra	2	4		19			1	1	27	4
Nouadhibou	73		3	1	91	2	82	16	268	44
Tivlitt	17						2		19	3
Lemcid	7						2		9	1
Blavakh	3						12		15	2
Léhféré	2						11		13	2
Nouakchott	107			3	3		131		244	40
Pk 28	10						2		12	2
Pk 65							7		7	1
Total	221	4	3	23	94	2	250	17	614	100
%	36	1	0	4	15	0	41	3	100	

(source CNROP)

Table 5 : Number of migrating vessels according to origin of owners
(frame - survey, August 1989)

Lieux	N'diago	Nouadhibou	Imraguen	Fleuve	A.RIM	A.Pays	St-Louis	A.Séné.	Total	%
La Guerra	5	2		9	11				27	7
Nouadhibou	57		2	5	139	5			208	55
Tivlitt									0	0
Lemcid									0	0
Blavakh									0	0
Léhféré									0	0
Nouakchott	121				13	1			135	36
Pk 28	10								10	3
Pk 65									0	0
Total	193	2	2	14	163	6	0	0	380	100
%	51	1	1	4	43	2	0	0	100	

(source CNROP)

Table 6 : Number of migrating canoes according to origin of owners
(frame - survey, February 1989)

Lieux	N'diago	Nouadhibou	Imraguen	Fleuve	A.RIM	A.Pays	St-Louis	A.Séné.	Total	%
La Guerra	1	1		2	6				10	2
Nouadhibou	72			8	232	11			323	55
Tivlitt	11								11	2
Lemcid									0	0
Blavakh	11								11	2
Léhféré	3								3	1
Nouakchott	167			8	45	1			221	38
Pk 28	8								8	1
Pk 65									0	0
Total	273	1	0	18	283	12	0	0	587	100
%	47	0	0	3	48	2	0	0	100	

(source CNROP)

Table 7 : Synthetical presentation of Mauritanian artisanal fisheries

Types of fishing	Target fish	Fishing seasons	Type of gear	Type of vessel	Zone	Ethnicity of fishermen
Cephalopodes	Octopus	All year, with peaks from Jan. to Mar. and Jul. to Sep.	Pots	PP, WP, PMB WMB, PC, WC	4	All fishermen's community
Crustaceans	Lobster (langouste)	All year, with peaks from May to Sep.	Nets	PP, WP	1, 4	Wolof, Sulbabe
Pelagic	Sardinella	All year	purse seines	WP, seiners	2, 4	Wolof, Imraguen
	Scinidae	Jan.-Jun.	nets & lines	WP, PP, Launche	2, 3, 4	Wolof, Imraguen
	Mulet	Oct.-May	"shoulder" net	Launche	3,	Imraguen
Demersal	Sole	Not determined	net	WP	2, 3	Wolof
	Tollo	after scianidae	net	not determined	3, 4	Imraguen & Wolof
	Sparidae	all year	line	WP, PP	1, 2, 4	Wolof
	Others	all year	line, long-line, net	PP, WP	1, 2, 4	not determined

PP = Plastic pirogue

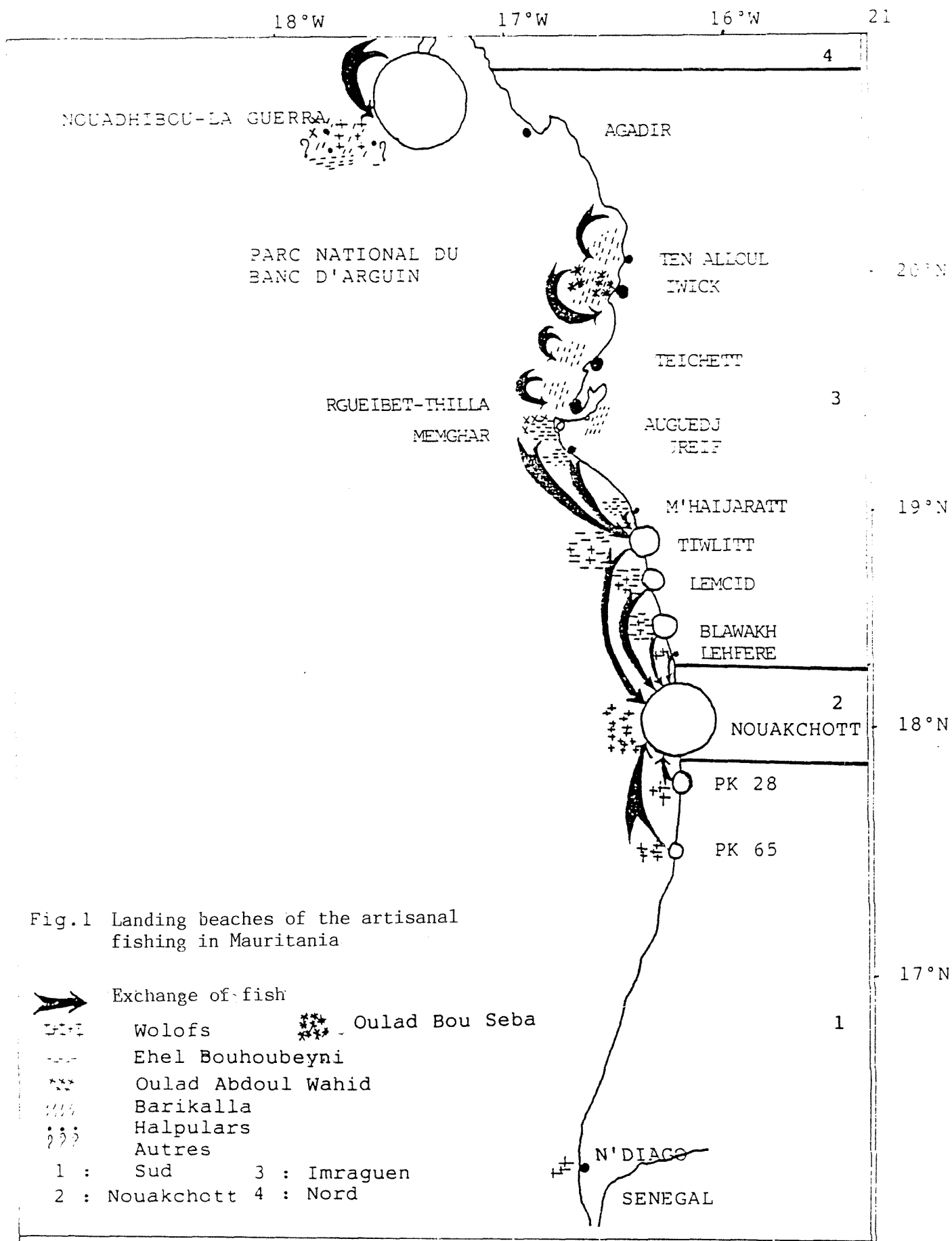
PMB = Plastic motor boat

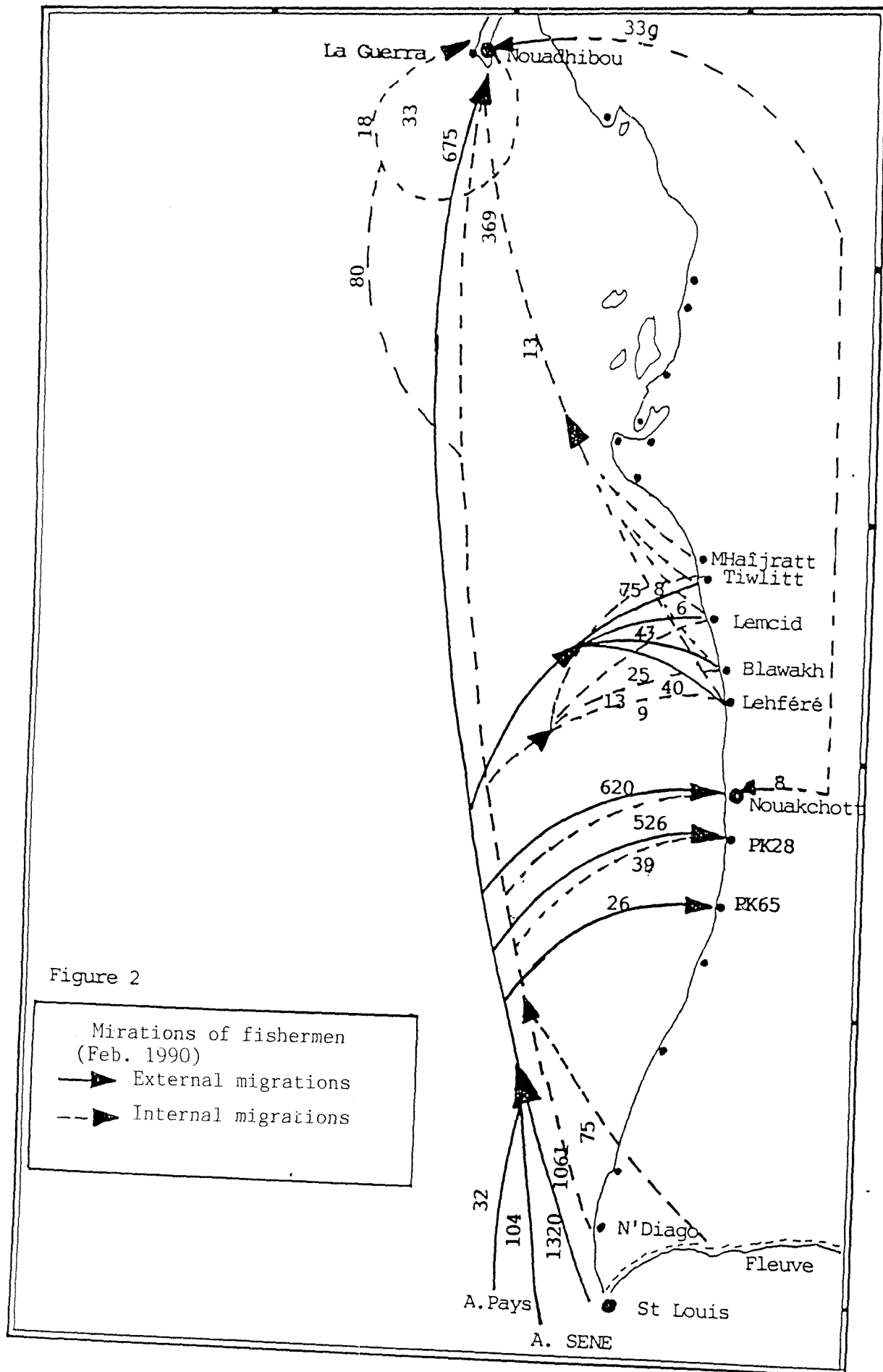
PC = Plastic canoe

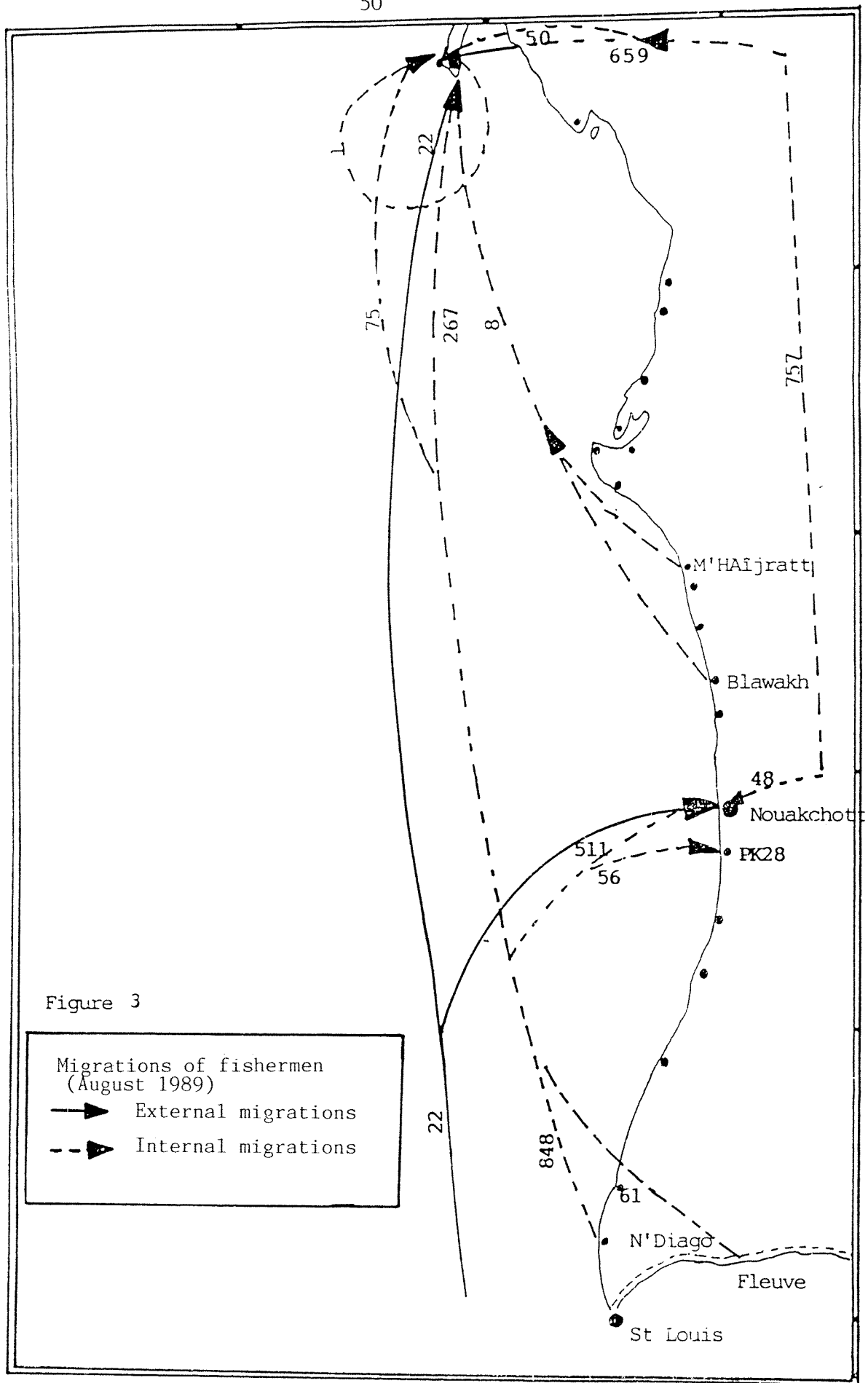
WP = Wooden pirogue

WMB = Wooden motor boat

WC = Wooden canoe







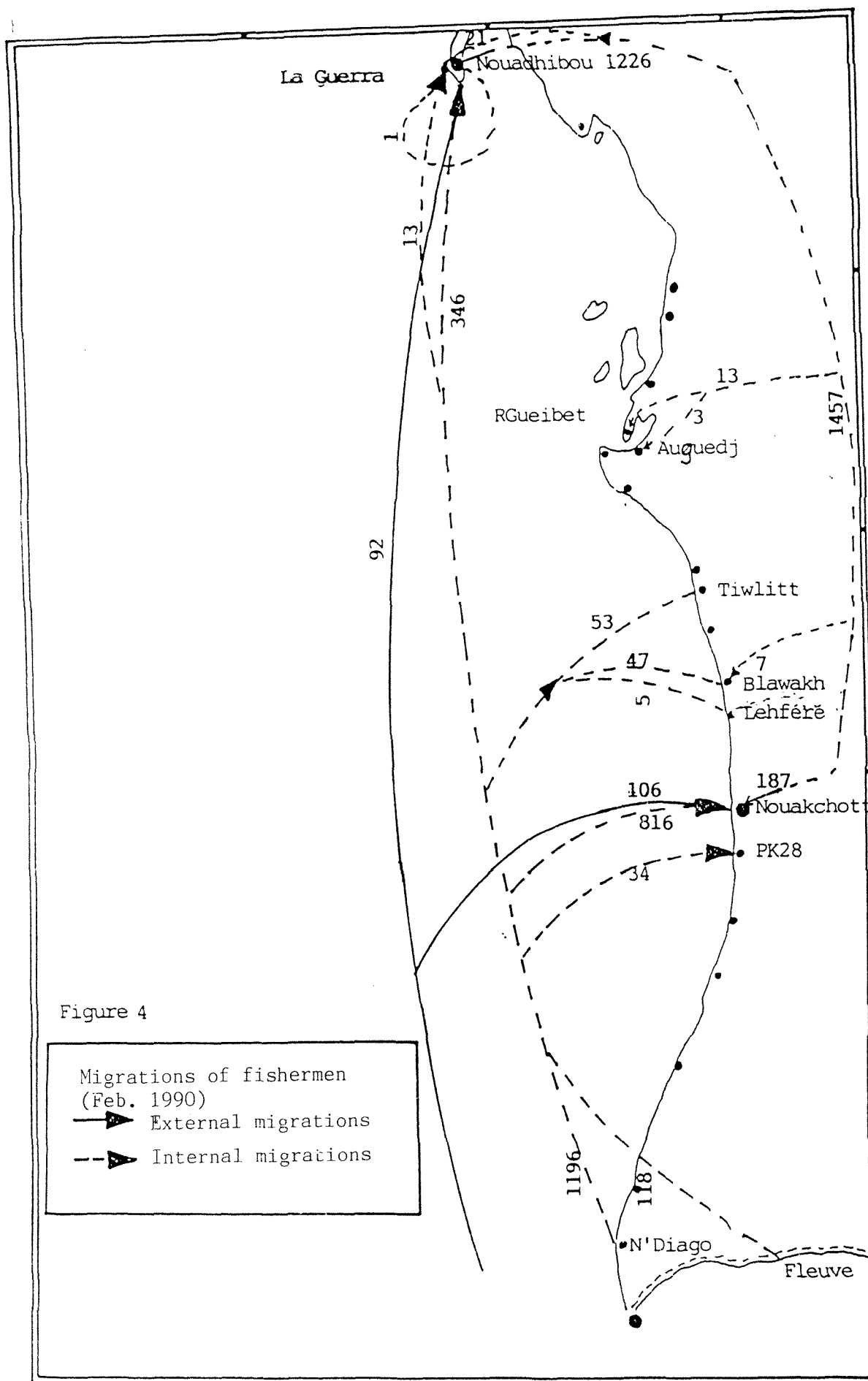


Figure 4

Migrations of fishermen
(Feb. 1990)

—▲ External migrations
- -▲ Internal migrations

MIGRATORY MOVEMENTS IN MARINE FISHERIES, SENEGAL

A QUANTITATIVE STUDY*

by

Christian Chaboud and Moustapha Kébé

INTRODUCTION

Canoe fishing is the most dynamic element of the Senegalese maritime fishery sector. This activity, open to technological and organizational innovation, has since independence, undergone a considerable upheaval emphasized by the evolution of landings (80, 000 t in 1965 to 200,000 t in 1988). The adoption of new fishing techniques (especially the purse seine, the longlines, the cuttlefish pot), the motorisation of the canoe fleet and improved conditions in preserving the catch (ice in holds) are all well-known and well- documented features of Senegalese canoe fishing today. (Chaboud and Kebe 1986). Another remarkable aspect of this activity is the long documented existence of migration movements of various scales along the Senegalese coastline or towards neighbouring countries (Gambia, Guinea Bissau, Guinea, Mauritania) (Chaboud and al. 1988) up until 1989. One can state, without doubt, that Senegal is the second source of fishermen migrations after Ghana in West Africa (Chaboud 1989).

In the following study we will attempt to quantify as closely as possible the internal migratory phenomenon for one reference year, bringing out its seasonal aspect, the fishing techniques concerned, the places of origin and destination. In the second part, we will attempt to analyse this phenomenon, emphasizing significative particularities such as differential ethnic strategies, the impact of the spreading of fishing techniques and know-how, the consequences on relationships among fishermen's communities. In conclusion, we will put forward several ideas on the kind of studies to be undertaken in order to better understand this phenomenon.

* Translated from French.

1. EXTENT OF MIGRATORY PHENOMENON IN SENEGAL

1.1. Methodological aspects

Quantifying fishermen migrations is not easy. Administrative population censuses are not of much help as they only give information on the population "by right" (1). They cannot therefore, be of help in measuring short-term migrations. In addition, the fishermen are not portrayed as a particular socio professional category : they are lumped together with agriculturalists and livestock breeders in one single group. Also, as migrant fishermen often settle on the outskirts of villages with a sedentary population, in precarious and "non formal" conditions, their numbers is likely to be under-estimated in village counts (2).

Confronted with this lack of information on such an important and recognized phenomenon, yet faced with the necessity to measure its extent (3) the CRODT/ISRA has, since 1980, decided on carrying out inventories of the canoe fleet twice a year; during these operations, the origins of the canoes are taken into account in order to chart migration flows (SOCECO-PECHART, 1982, 1983, 1985, 1990a, 1990b, 1990c).

Migrations are therefore apprehended through canoe movements. Complementary information is collected about the activities (4), the fishing techniques used and motorization.

The investigation is carried out over a minimal length of time (usually a week) so as to avoid double counts (5).

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1. This means those individuals counted according to their usual place of residence, including those absent for less than six months.
 2. The fishermen show a certain mistrust (often justified) towards official counts. Numerous fruitless attempts to register the canoes proves this.
 3. Especially in order to be able to extrapolate the fishery statistics over the whole coastline.
 4. Any craft having taken part in fishing in the month preceding the investigation is considered as "active".
 5. There are no efficient means by which to identify individual craft. Registration of the canoes would be a great help in improving the enumeration system in artisanal fishery.

Estimation of the workforce directly employed in fishing cannot be immediate. It entails an estimation of average crews per type of fishing unit. Jobs indirectly linked to migration can only be commented upon qualitatively, considering information available.

1.2. Migration movements charted over one year (1983)

We have chosen the year 1983, for which we have exhaustive information on canoe migrations along the entire coastline, for May and September. Figures 1 and 2 are charts where the migration movements brought to light. They show a predominantly north-south movement.

The total number of migrating canoes rises to 1,110 in May and falls to 800 in September, which shows a decrease in migrations during the rainy season. For these two periods the migration rate of the canoe fleet falls from 25 % to 17 %.

Annex 1 portrays the migratory pattern during the cold season in Senegal. For each place investigated and for every region, rates of emigration and immigration have been computed in order to bring out the particularities of each village and region.

$$\begin{aligned} \text{Rate of emigration} &= \frac{\text{Total number of migrating canoes} \\ &\quad \text{originating in one place or region}}{\text{Total number of native canoes in the} \\ &\quad \text{the place or region}} \\ \\ \text{Rate of immigration} &= \frac{\text{Total number of canoes coming from} \\ &\quad \text{other places or regions}}{\text{Total number of canoes to be found in} \\ &\quad \text{the one place or region.}} \end{aligned}$$

Table 1 shows that the main consequence of migration movements is a concentration of the canoe fleet : 47 places of origin compared to 26 places of destination.

The ten main places of origin are (in decreasing order of importance).

Place	Rate (%) of emigration	Percentage of total number of migrant canoes	Regions
Saint Louis	47	47	Grande Côte
Mbour	20	8	Petite Côte
Bassoul	100	5	Sine Saloum
Yenne	61	4,5	Cap Vert
Dionewar	66	3,4	Sine Saloum
Ndayane	60	3,2	Petite Côte
Guereo	61	2,2	Petite Côte
Bassar	100	2,2	Sine Saloum
Tassinere	91	1,8	Grande Côte
Pilote	78	1,6	Grande Côte

Guet-Ndar (Saint-Louis) represents 50 % of the total migration flow. The other places of origin are of lesser importance : however, it is to be noted that for most of them the rate of out migration is higher than that of Saint-Louis.

The ten main places of destination are as follows :

Place	Rate (%) of immigration	Percentage of total number of migrant canoes	Regions
Kayar	68	35	Grande Côte
Joal	63	30	Petite Côte
Kafountine	84	5	Casamance
Boucotte	100	5	Casamance
Mbour	12	4,7	Petite Côte
Missirah	92	3,1	Sine Saloum
Pte St. Georges	100	2,1	Casamance
Yoff	7	2,1	Cap Vert
Soumbédioune	10	1,9	Cap Vert
Hann	17	1,8	Cap Vert

Two places (Kayar and Joal) receive 65 % of migrant canoes.

Among the other destinations listed, one should note the peculiarity of a few maritime and estuarian centres in Casamance that have an immigration rate higher than 90 %.

The analysis of intra and inter-regional migrations allows the highlighting of movement specificities according to distance and to bring out the particularities of the different maritime regions. Complete information is given in table 2 (month of May) and in figure 2 (May and September). In this figure the types of gear concerned are also indicated.

Table 3 indicates the intra and inter-regional rates of immigration and out migration (6). A Regional typology seems to take shape.

The Grand Côte is undoubtedly the region where the migratory vocation of fishermen is the most obvious : 40 % of the canoes originating there do migrate. This migration is more or less internal to the region (28 % of the craft). In Cap Vert, fishermen rarely migrate (8 %) but when they do, it is towards other regions (Casamance and Petite Côte in particular). Migrations from petite-Côte are moderate (22 %) and mainly local. Finally the Sine Saloum region is characterized by quite large-scale migrations (30 %) mainly towards other regions (Petite Côte: 18 %, Casamance : 7 %). Migrations from Casamance (32 %) remain totally internal to the region.

Of all the coastal regions, Casamance, with a total immigration rate of 78 % and an inter-regional rate of 68 %, is undoubtedly the host region that depends the most on migrant fishermen.

The two other regions where total immigration rates are relatively high are Petite Côte (34 %) and Grande Côte (32 %). However, a difference exists between the two areas : in the latter, the migrations are essentially of internal origin, while in the former they originate from all the other coastal regions (except Casamance).

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6. These rates are defined as precedently. The intra-regional rates are relative to flows within the coastal regions : the inter-regional rates refer to flows between regions.

All types of fishing to be found in Senegal are concerned by migration, though they do vary. In May 1983, the percentage of migrant canoes per fishing type was :

Fishing Technique	% Migrants canoes
Purse seine (net canoe)	24 %
Purse seine (fish canoe)	23 %
Surrounding gillnet	67 %
Beach seine	11 %
Lines - set nets - traps	24 %
All the types of gear	25 %

It seems that only two fishing techniques stand out : the beach seine and the surrounding gillnet. The latter is mainly used by Nyominka fishermen from the Saloum islands whenever they migrate to Petite Côte. The low rate noted for beach seining should be interpreted with caution as this type of gear is mostly used during the hot season. It is noticed however, that a large number of beach seines remain behind, especially in the Cap Vert region.

An estimation of the directly employed workforce (that is, the crews), can be given using the average size of crew per fishing type (7). Out of 23,148 directly employed in May 1983, 5,214 (22 %) were migrants.

1.3. Dynamics of medium-term migration (1981 - 1990)

For the three main coastal regions (Grande Côte, Cap Vert, Petite Côte), we have tried to determine whether the evolutionary tendencies of the dry season migration pattern were noticeable in the medium term. In order to do this, we have used those years for which information was available, in order to compute global intra and inter-regional rates of immigration for each region (table 4).

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7. The average crew is 4 fishermen for line -set net-cuttle fish canoes, 28 for purse seines, 30 for beach seines and 8 for surrounding gillnets.

Examination of the results clearly underlines the great stability of regional canoe fleets up until 1989. The rates of immigration appear relatively constant for the Grande Côte and the Petite Côte, with a slight increase for the latter. Cap Vert is the only region to experience a significant rise in the global rate of immigration. This is due to canoes coming from other regions (inter-regional immigration rate rose from 3,5 % in 1983 to 13,5 % in 1989). This increase is relative to the dynamics of commercial outlets in this region, which have experienced a considerable increase in beach prices.

For the year 1990 a marked increase in the number of canoes per region and in migratory flow can be observed : nearly 150 more canoes came to the Cap Vert region. This is due to the return of Senegalese fishermen from Mauritania the year before. In 1987, 307 canoes from Saint-Louis were counted in Mauritania. The rise in the number of canoes originating in Grande Côte between March 1989 and March 1990 is about 400. The difference (more or less one hundred canoes) may be explained by intensified migration from Senegal to Mauritania in 1989, but this hypothesis requires verification.

2. ANALYSIS OF THE MIGRATION PHENOMENON

2.1. Migrant fishermen communities and differential migration strategies

Migration movements along the Senegalese coast were already observed at the beginning of the century, during the first scientific attempt to study fishing and fish resources by the naturalist Abel Gruvel (8).

At that time he noted the considerable presence of Wolof fishermen from Guet-N'dar (Saint-Louis) in the Cap Vert region (especially at Rufisque) where they were taking advantage of commercial outlets allowed by the development of the trade economy (Gruvel, 1908). Lébou from Cap Vert and Wolof from Guet-N'dar were coming to the Petite Côte, where sedentary Sérère fishermen were still few. Estuarine fishery was quite active in Casamance, but only practiced in a significant manner by migrants. Among the latter, one may note the presence of Walowalo (from northern Senegal), Lébou, and Wolof from Saint-Louis.

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8. Assigned to "the study and the organization of A.O.F. fisheries", by decision of Governor-General Roume in 1906.

Some marginal migrant groups from Mali such as the Bozo and the Somono originating in the Niger inner-Delta region must also be mentioned (9).

Although the fishing situation has undergone radical changes since then, it is nevertheless remarkable to observe that the Wolof from Guet-Ndar and the Lébou from Cap Vert continue to follow the migratory patterns described by Gruvel. However, the present situation differs somewhat owing to the arrival of new migrants (Sérère Nyominka from the Saloum islands), the development of large fishing centres which there were of little importance at the beginning of the century (10), and the development and later the hegemony of monetary economy.

Thus today three main communities (11) are responsible of maritime fishing migrations. They will be presented hereafter with emphasis on their particular migratory habits.

Guet-Ndar fishermen are the most specialized fishing community in Senegal. History and its consequences have caused them to rely on fishing for all their essential needs (12).

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9. However, these groups seem to have kept themselves to interfacial zones between the maritime and continental areas (Sine Saloum, Casamance). The long presence of Somono on upper Senegal River (upstream of Matam), is shown by the confusion often made by Sérère fishermen from Sine Saloum between the Subalbe, of Toucouleur ethnicity, and the Somono.
 10. Among which we can point out Kayar (where Gruvel only mentioned a few canoes) on Grande Côte, Hann (Yarakh) in Cap Vert, Mbour and Joal on Petite Côte, Kafountine in Casamance.
 11. The term "community" seems more adequate than that of "ethnic group" with relation to the Guet Ndar fishermen whose historical background indicates integration of members of different ethnic groups.
 12. The Guet Ndar were not always exclusively fishermen. When Saint-Louis was the commercial outlet to the Atlantic for produce collected along the river Senegal (arabic gum, leather, ivory, etc...), they served as longshoremen facilitating the unloading of large vessels unable to cross the bar ; they also served as boatmen on the river itself. With the decline of maritime commerce, they reconverted to river, then sea fishing. They differ from the other groups in that they no longer have access to land and have thus totally abandoned agriculture during the last century (Chauveau 1984).

The abundance of fish off Saint-Louis, determined by the pattern of maritime seasons, (13) does not suffice to guarantee them enough resources. The Guet Ndar population is also confronted with an over-density phenomenon. Rapid demographic growth having to be absorbed by a village unable to extend its boundaries much further.

Faced with these problems, Guet Ndarians have developed an opportunistic migration strategy whose aim is to make use of their know-how in fishing wherever economic, social and natural conditions allow them to. The range of fishing techniques mastered by these fishermen is remarkable in its diversity, enabling them to adapt to diverse conditions : at one time Guet Ndar fishermen were spread over an area ranging from Dakhla (Western Sahara, 24 ° N) to the Bijagos Islands (Guinea Bissau, 11° N), with incursions into the Gulf of Guinea as far as San Pedro (Diaw, com.pers.).

The Lébou form a more heterogenous group with regards to migration strategies. These seem to be conditioned by the fishing agriculture inter relationship as well as the access to the profitable commercial outlets in Cap Vert.

The Lébou from northern Cap Vert (Kayar village) do not seem tempted by migration. A few movements used to take place (near Yoff) or are still taking place (near Mboro), but at a very limited scale. This could be explained by the complementary fishing and market-gardening in the Niayes (14).

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13. Certain species are to be found in the cold season (November to May) when the upwelling generated by the north-east tradewinds is present. Others are more abundant in the rainy season when there is an increase in freshwater intakes from the river. However, the main factor of abundance of resources (where deep-sea pelagic fish are dominant) remains the upwelling in the cold season (Roy 1990).
 14. This is an area of hollows in the dunes stretching along the Grande Côte. The presence of shallow waters or pools allows market-gardening all year except for the last few months of the rainy season.

The Lébou from Cap Vert strictly speaking (from Dakar to Bargny) do not migrate much either. Dakar Lébous seem less and less involved in fishing while those living in the villages extending from Hann to Bargny are taking advantage of the commercial outlet offered by the Hann beach, where prices are significantly higher than those in the landing centres further south (Chaboud and Kebe 1989).

The Lébou south of the Cap Vert region and the Petite Côte have a more confirmed migratory vocation. Farming is practiced in the rainy season only, thus migrations in the dry season are complementary to the farming calendar. They have taken advantage of the development of Mbour and Joal, relatively near their village of origin. They also undertake migrations further afield towards Sine Saloun (15) and Casamance, where they use very selective fishing techniques (purse seines for sole and lobster (16)).

The Nyominka from the Saloum islands have turned to fishing migrations in more recent times. Commercial sea fishing has only lately become important to the inhabitants of the Gandoun islands. Fishing migrations are only one particular aspect of the multiform migrations (Nguyen Van Chi Bonnardel, 1977) they undertook when living conditions deteriorated in their villages, following the regression of farming and the shortage of freshwater (17). However, the Nyominka have long practiced estuarian and maritime navigation, going back to the time when their big transport canoes were actively trading along the "southern rivers" (Pelissier, 1966) and even as far as the Côte

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15. The Lebou migrations towards Sine Saloun are ancient. Gruvel mentions them and the term "lébou" is used by island fishermen to point at sea-going canoes. Today Lébou fishermen are mainly based in Missirah because of existing infrastructures and commercial facilities.
 16. Set net fishing of lobster in Casamance goes back to the arrival of fishermen from Yenne village, who had a supply contract with an export company in Cap Vert (Grands Viviers de Dakar) and who formed a cooperative of Yenn lobster fishermen.
 17. Rice cultivation, which was an important element of their agricultural production system, was abandoned about 15 years ago ; long -cycle brands of cereal seem to have been replaced by short-cycle ones, the surface of arable land is going down because of soil salinization. Finally, freshwater supply is getting scarcer.

d'Ivoire, it seems. Their fishing techniques (Chaboud and Laloe 1983) and to a lesser extent, the migratory sites they frequent, seem largely determined by the particular context of their islands of origin. When they migrate along the Petite Côte (especially to Joal), it is mainly to use the surrounding gillnet, (18) ("saïma"), the purse seine, the drift bottom gillnet, ("yolal") and the set gillnet for "yett" (19). Their fishing zones are concentrated off Pointe Sangomar, at the Saloum rivermouth. It would appear therefore that Nyominka migration to the Petite Côte is mainly inspired by commercial motivations and is a response to the islands' seclusion. The search for marine resources cannot be given as a determinant factor, their fishing zones often being closer to their villages of origin than to their migration sites.

Migrations towards Casamance appear inspired by other motivations. As a fact, it is noted that Nyominkas have preferred to settle in estuarine sites (Ponta Bassoul, Ponta Diogane) or at the mouth of "bolons" (20) leading to the littoral (Saloulou) and of which they are often the sole occupants.

It is also striking to note the similarity of chosen sites with their villages of origin : sheltered mangrove areas set back from the coast, allowing the mooring of canoes without beaching them (21). These migrations seem to correspond to a pattern of fishing colonization of certain parts of the Casamance environment for which Nyominka's techniques practised on the islands seemed well-adapted (beach seine, drift gillnet).

18. They appear as having a quasi-monopoly of this technique.

19. Cymbium pepo, a gasterpod mollusc, eaten as a seasoning after being fermented and dried. Fishing for this species is very active on the Petite Côte and at Dionewar (Saloum islands).

20. Term of mandingo origin designed for sea channels communicating with the coast of the estuaries.

21. Sea-going Nyominka canoes differ from those of the Lébou or from Saint-Louis. They are heavier (keel and sides made of "red-wood"), lower at stern and wider in the middle. These characteristics render them unsuitable for crossing the surf and beaching in rough areas.

This hypothesis is reinforced by a number of elements : the oldest settlements bear the names of their founders villages of origin (22). These settlements correspond to sites where (or go back to a time when) resource exploitation by Diola (23) fishermen was of little importance and interaction with other migrant communities seemed minimal.(24) The search for a resource still found in abundance seems to be the determinant factor here, commercial seclusion having been solved through different means (25).

2.2. Impact of migration

The analysis of these population movements effects is particularly interesting for the understanding of the historical and socio-economic dynamics of artisanal fisheries (Lawson, 1983).

The impact on fishing technology and know-how is obvious : those populations specialized in migrating are also those that best master fishing techniques. It is generally accepted that their presence contributes in the spreading of the latter among host populations.

-
- 22. Ponta Bassoul was founded in 1928 according to information given to us by Bassoul fishermen.
 - 23. It should be noted that the Nyominka Sérère in Casamance have restricted themselves to fishing, whereas they were rice-growers in their villages of origin. Should this be interpreted as an avoidance of competition with the "diola" farmers or a mere choice for a specialization in fishing combined with migration ? We are unable to answer this question at the present time. However, we must note that up until recent times, fish resources in Basse Casamance were less exploited than agricultural land resources.
 - 24. Other migrant communities in the region (Lébou, Guet Ndar) were exploiting other resources.
 - 25. Among which are the transformation of beach seine catch (mainly mullet) into "tambadiang", later sold at Ziguinchor ; and the transport of valuable species in cold-storage canoes (equipped with ice-boxes) towards Ziguinchor, or better still, towards Ndangane in Sine Saloum where they are sent by road to Dakar.

Thus the widespread use of those types of craft most frequently found (Saint-Louis and Nyominka type canoes) is directly linked to fishermen migrations. The same applies to the adoption of fishing techniques such as the beach seine, the cast net, the "yolal", the "félé-félé" (26), in certain communities is undoubtedly related to the arrival of migrant fishermen already using such techniques (Chaboud and Laboe 1983, Diaw 1985).

Migratory movements generate important monetary and economic flows, making significant contribution to the local economies (fish supply, purchases from local craftsmen, participation in the village economy).

One cannot ignore, however, that competition, tension, and even conflicts may arise if migrants' interests being in contradiction with those of local fishermen.

Conflictual relationships between sedentary Kayar fishermen and migrants from Guet-Ndar concerning the use of set nets are a characteristic example of these difficulties :

"In 1985, conflict broke out between Lébou fishermen from Kayar and migrants from Guet-Ndar when an ancient ruling limiting the use of set nets was being violated. This is a classical example, combining, on one hand, technological incompatibilities between fixed and active gears (the migrants in this case were using bottom gillnets hindering the use of purse seines and handlines) and on the other, antagonistic community concepts related to rights of fishing space and the access to resources. Lébou peasant fishermen want to keep control over the exploitation of their "fishing territory" ; the migrants under accusation complain loudly that free access to the sea and to its resources is every Senegalese fisherman's right and which is necessary to perpetuate their activities and lifestyle" (Chaboud, 1989).

Conflicts have also been observed at Hann and on the Petite Côte between local and migrant fishermen. They more often than not concern the use of non-compatible fishing gears (set nets and drift nets for example).

26. "Félé-félé" : surface drift gillnet.

CONCLUSION

This text does not pretend to treat all socio-economic aspects of fishermen migrations in Senegal. Many important questions need further analysis in order to really grasp this phenomenon, notably :

- labour migrations cannot be understood solely in reference to canoe migration patterns. Certain seasonal migrations take place from the interior to the coast and not along the coast. Fishing migrations do not only concern fishermen, but also merchants, craftsmen, and the processors ;
- is there a specific quality of migrant fishing units with regards to their economic organization, does this make them more efficient than others ?
- what is the determinism behind fishermen migrations ? Is it economic (search for commercial outlets), social (migration as a way to escape the constraints of the home-environment) or "natural" (search for fish) ?
- what are the repercussions of these migrations ?
- what processes underly fishing migrations : the setting-up of migration networks, fishermen and fishing units, individual migration patterns and those of the fishing units, the duration and repetitive nature of these individual or collective movements ?

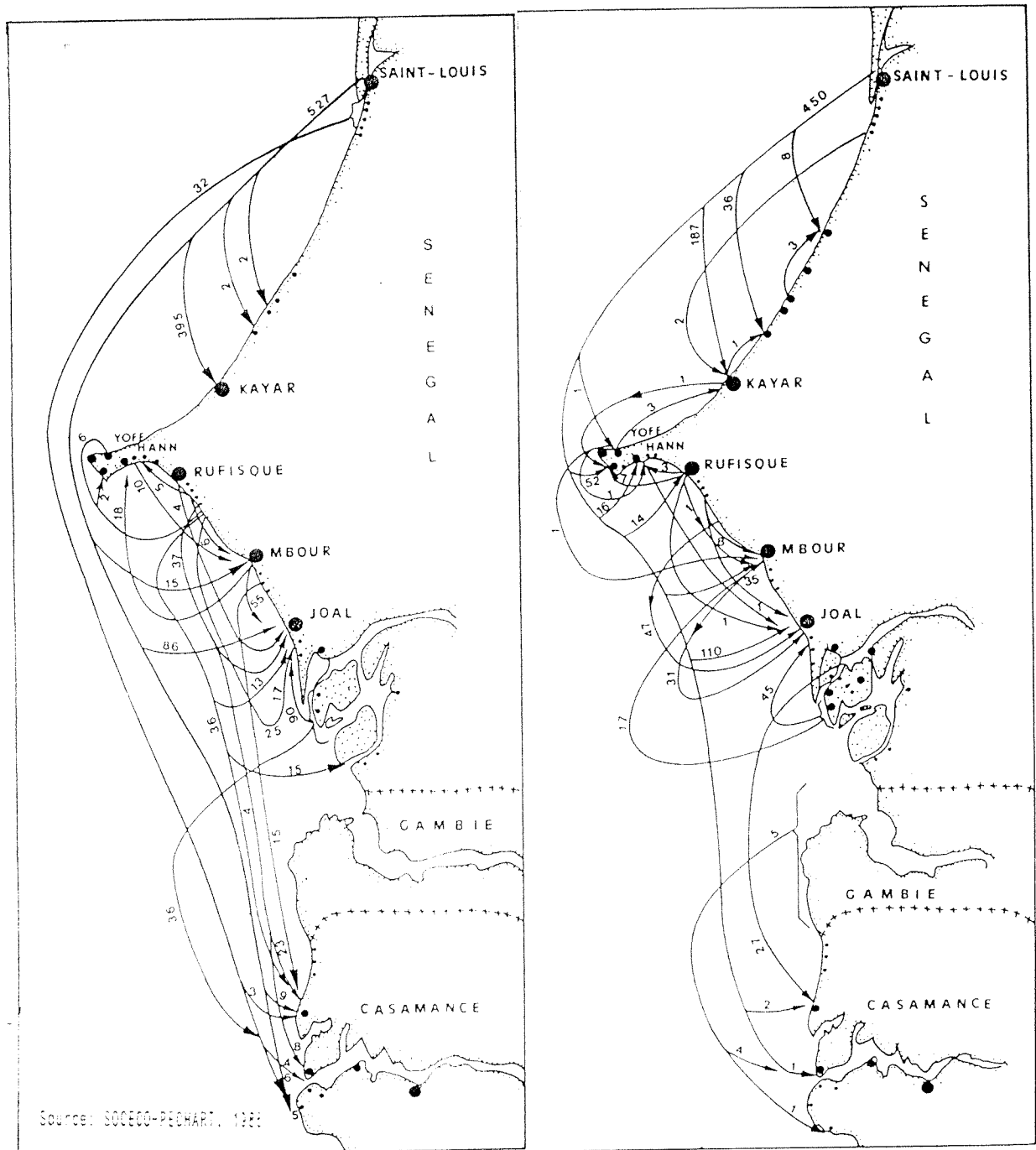
Answers to the above can only be found if specific studies are undertaken about fishing migrations ; such studies must be pluridisciplinary in order to tackle the different aspects of the problem and to reach a relevant explanatory framework.

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MAY

SEPTEMBER

Figure 1. Canoe movements along the Senegalese coast-line :
 May and September 1983
 (Scale 1 : 1,000,000)

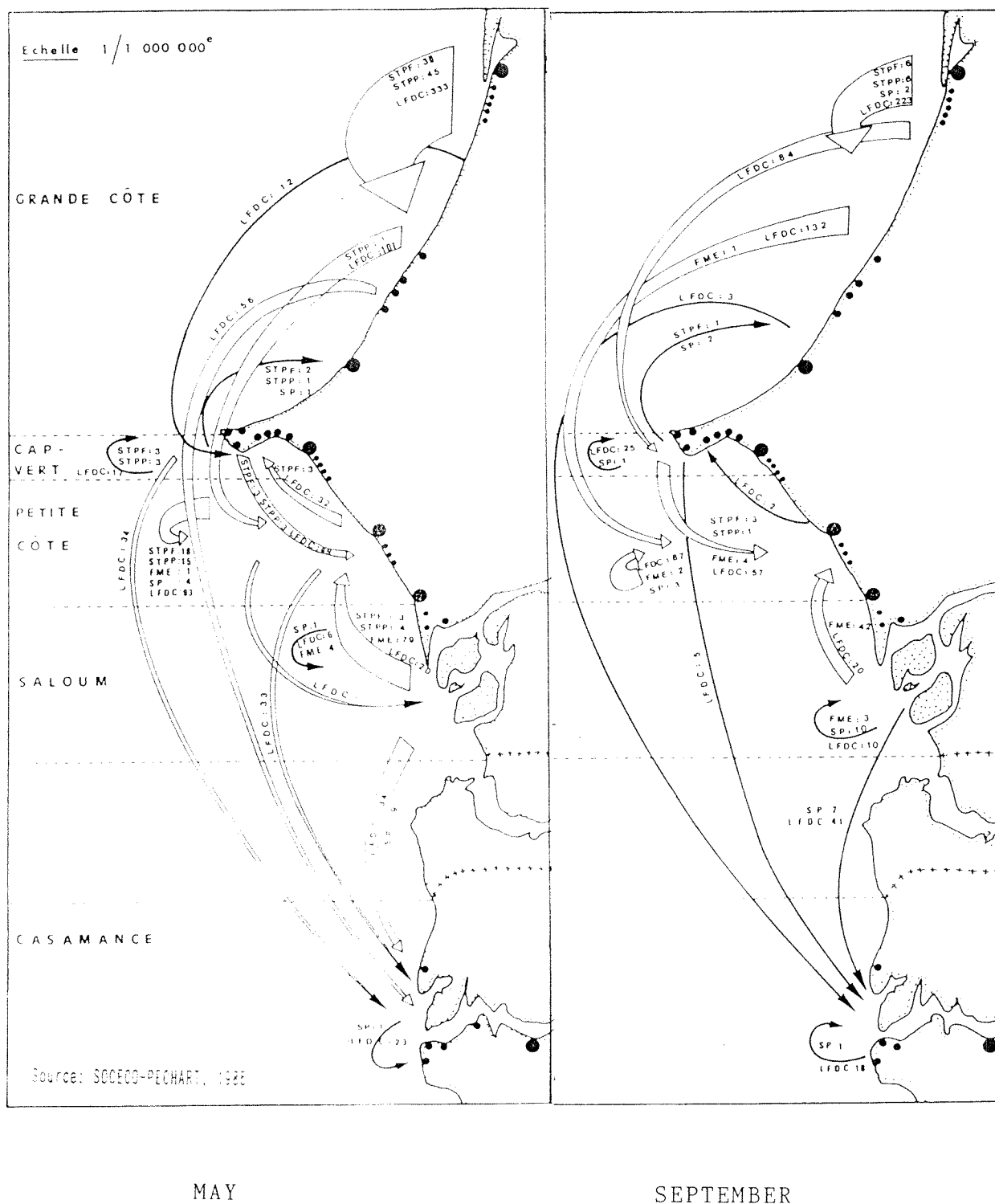


Figure 2. Intra and inter-régional mouvements according to type of fishing gear : May and September 1983.

Table 1 : Migratory scheme during the cold season in
Senegal (May 1983)

LIEUX	1 Pirogues présentes	2 Pirogues originaires parties en migration	3 Pirogues extérieures venues en migration	4 effectif pirogues origi- naires (1+2-3)	5 solde migra- toire (2-3)	6 taux d'émigra- tion (2/4)	7 taux d'immigra- tion (3/1)
SAINT-LOUIS	576	527		1103	527	47,78%	
DOUNE-B	2	2		4	2	50,00%	
PILOTE	5	18		23	18	78,26%	
TASSINIERE	2	21		23	21	91,30%	
DIOGO		9		9	9	100,00%	
MBOUMBAYE	1			1	0		
MOUIT	2			2	0		
TARE	14			14	0		
THIOUGOUNE	8			8	0		
FASS BOYE	70		14	56	-14		20,00%
MBORO	3		3	0	-3		100,00%
KAYAR	579	1	396	184	-395	0,54%	68,39%
GRANDE COTE (FLUX INTER-REGIONS)	1262	578 170	413 5	1427 1427	165 165	40,50% 11,91%	32,75% 0,40%
CAMBERENE	3			3	0		
YOFF	319	6	24	301	-18	1,99%	7,52%
NGOR	79			79			
OUAKAM	83	3		86	3	3,49%	
SOUMBEDIOUNE	218	1	22	197	-21	0,51%	10,09%
ANSE BERNARD	71			71			
BEL AIR	74			74			
HANN	112	6	20	98	-14	6,12%	17,86%
THIAROYE	54	11	4	61	7	18,03%	7,41%
MBAO	19	4		23	4	17,39%	
RUFISQUE	108	7		115	7	6,09%	
BARGNY	62	11		73	11	15,07%	
SENDHOU	42	3		45	3	6,07%	
TENNE	31	49		80	49	61,25%	
NDITAKH	17			17			
NIANGAL	41	15		56	15	26,79%	
CAP VERT (FLUX INTER-REGIONS)	1333	116 93	70 47	1379 1379	46 46	8,41% 6,74%	5,25% 3,53%
KELLE	1	8		9			
TOUBAB DIALAW	17			17			
NDAYANE	24	36		60	36	60,00%	
POPENGUINE	10	3		13	3	23,08%	
GUEREO	20	32		52	32	61,54%	
SOMONE	10			10			
NGAPAROU	19	14		33	14	42,42%	
SALI	27	9		36	9	25,00%	
MBOUA	407	90	52	445	38	20,22%	12,78%
TROPICAL	10		1	9	-1		10,00%
NIANING	28	17	7	38	10	44,74%	25,00%
POITE SARENE	52	2		54	2	3,70%	
MBODIENNE	1			0	-1		100,00%
WARANG	2			2			
JOAL	524	4	333	195	-329	2,05%	63,55%
PETITE COTE (FLUX INTER-REGIONS)	1152	215 84	394 263	973 973	-179 -179	22,10% 0,63%	34,20% 22,83%

Source of data : SOCECO PECHART, 1985

Table 1 (cont.)

LIEUX	Pirogues présentes	1 Pirogues originares parties en migration	2 Pirogues extérieures venues en migration	3 effectif pirogues origi- naires (1+2-3)	4 solde migra- toire (2-3)	5 taux d'émigra- tion (2/4)	6 taux d'immigra- tion (3/1)	7	8
PALMARIN		42			42				
NDANGANE		47			47				
DJIFERE		25			25				
FOUNDIOUGNE		28			28				
NDOLETTE		4			4				
SOKONE		2		2	0	-2		100,00%	
MEDINA SANKOLI		7			7				
SANDIKOLI		7			7				
TOUBACOUTA		2	1		3	1	33,33%		
DIRNDA			3		3	3	100,00%		
BASSAR			25		25	25	100,00%		
BASSOUL			55		55	55	100,00%		
THIALANE			8		8	8	100,00%		
DASSILAM	1				1				
NEMABA	8				8				
SOUKOUTA	7				7				
MISSIRAH	38			35	3	-35		92,11%	
FALIA	1			1	0	-1		100,00%	
DIOGANE	6		10		16	10	62,50%		
DIONEWAR	19		38		57	38	66,67%		
NIODIOR	33		10		43	10	23,26%		
NGADIOR			8		8	8	100,00%		
DIOFANDOR	7			1	6	-1		14,29%	
SETANTI	60		2		62	2	3,23%		
SIWO			11		11	11	100,00%		
MAR-F			1		1	1	100,00%		
GUISWAR			1		1	1	100,00%		
DIOGAYE	10				10				
DJINAOR	23				23				
BAOUT	21				21				
FAMBIANE	19				19				
DIAMENIADIO	8				8				
SINE SALOUM (FLUX INTER-REGIONS)	425	173	39	559	134	30,95%	9,18%		
		149	5	569	134	26,65%	1,18%		
ABENE	9	4	9	4	-5	100,00%	100,00%		
DIANNAH		2		2	2	100,00%			
KAFOUNTINE	65	11	55	21	-44	52,38%	84,62%		
KAYELO		1		1	1	100,00%			
BOKO		1		1	1	100,00%			
SALOULOU	16		14	2	-14		87,50%		
BOUNE	1			1					
MANTATE	2			2					
SANKOYE	7		7	0	-7		100,00%		
KARABANE	2			2					
DIOGUE	11		7	4	-7		63,64%		
KACHOUANE	2			2					
OURONG	4			4					
POINTE SAINT GEORGES	24		24	0	-24		100,00%		
ELINKINE	12		3	9	-3		25,00%		
NIKINE		4		4	4	100,00%			
ZIGUINCHOR	9	1		10	1	10,00%			
DIONGUE K.	4			4					
BOUDIEDIETE	4			4					
CAP SKIRRING	9		9	0	-9		100,00%		
DIEMBERING	8		8	0	-8		100,00%		
BOUCOTTE	54		54	0	-54		100,00%		
CASAMANCE (FLUX INTER-REGIONS)	243	24	190	77	-166	31,17%	78,19%		
		0	166	77	-166	0,00%	68,31%		
TOTAL	4415	1106	1106						

Source of data : SOCECO PECHART, 1985

Table 2. Intra and inter-regional migrations
(May 1983)

	ORIGINE	GRANDE COTE	CAP VERT	PETITE COTE	SINE SALOUM	CASAMANCE	TOTAL
	Pirogues origi- naires	1427	1379	973	559	73	4415
	pirogues migrantes						
DESTINATION	Pirogues présentes						
GRANDE COTE	1262	408	4	1	0	0	413
CAP VERT	1333	12	23	35	0	0	70
PETITE COTE	1152	102	55	131	106	0	394
SINE SALOUM	425	0	0	15	24	0	39
CASAMANCE	243	56	34	33	43	24	190
TOTAL	4415	578	116	215	173	24	1106

Source of data : SOCECO RECHART, 1985

Table 3. Rates of regional immigrations and emigration
(May 1983)

ORIGINE	GRANDE COTE	CAP VERT	PETITE COTE	SINE SALOUM	CASA- MANCE	TAUX D'immigration global	intra régional	inter régional
DESTINATION								
GRANDE COTE tx émig.	28,59%	0,29%	0,10%	0,00%	0,00%			
tx émig.	32,33	0,32%	0,08%	0,00%	0,00%	32,73	32,33%	0,40%
CAP VERT tx émig.	0,84%	1,67%	3,60%	0,00%	0,00%			
tx immig.	0,90%	1,73%	2,63%	0,00%	0,00%	5,25	1,73%	3,53%
PETITE C. tx émig.	7,15%	3,99%	13,46%	18,96%	0,00%			
tx immig.	8,85%	4,77%	11,37%	9,20%	0,00%	34,20	11,37%	22,83%
SINE SALOUM tx émig.	0,00%	0,00%	1,54%	4,29%	0,00%			
tx immig.	0,00%	0,00%	3,53%	5,65%	0,00%	9,18	5,65%	3,53%
CASAMANCE tx émig.	3,92%	2,47%	3,39%	7,69%	32,88%			
tx immig.	23,05%	13,99%	13,58%	17,70%	9,88%	78,19	9,88%	68,31%
Taux d'émig. global	40,50%	8,41%	22,10%	30,95%	32,88%			
intra-régional	28,59%	1,67%	13,46%	4,29%	32,88%			
Inter-régional	11,91%	6,74%	8,63%	26,65%	0,00%			

Source of data : SOCECO PECHART, 1985

Table 4. Evolution of regional immigration rates between 1981 and 1989 cold seasons.

!REGIONS	ANNEES	1981	1983	1985	1987	1988	1989	1990
!GRANDE COTE								
!Pirogues présentes		1072	1262	1297	1210	1025	1187	1393
!Pirogues venues en migration		376	413	393	383	438	423	478
!Taux global d'immigration		35,07%	32,73%	30,30%	31,65%	42,73%	35,64%	34,31%
!Pirogues de la même région			408	384	376	438	412	475
!Taux d'immigration intra-régional			32,33%	29,61%	31,07%	42,73%	34,71%	34,10%
!Pirogues d'autres régions			5	9	7	0	2	3
!Taux d'immigration inter-régional			0,40%	0,69%	0,58%	0,00%	0,17%	0,22%
!CAP VERT								
!Pirogues présentes		1372	1333	1360	1309	1412	1386	16,27
!Pirogues venues en migration		127	70	171	214	273	266	430
!Taux global d'immigration		9,26%	5,25%	12,57%	16,35%	19,33%	19,19%	26,43%
!Pirogues de la même région			23	58	76	65	79	99
!Taux d'immigration intra-régional			1,73%	4,26%	5,81%	4,60%	5,70%	6,08%
!Pirogues d'autres régions			47	113	138	208	187	331
!Taux d'immigration inter-régional			3,53%	8,31%	10,54%	14,73%	13,49%	20,34%
!PETITE COTE								
!Pirogues présentes		1007	1152	1242	1105	1334	1189	1448
!Pirogues venues en migration		335	394	554	476	541	453	537
!Taux global d'immigration		33,27%	34,20%	44,61%	43,08%	40,55%	38,10%	37,09%
!Pirogues de la même région			131	175	162	153	141	155
!Taux d'immigration inter-régional			11,37%	14,09%	14,66%	11,47%	11,86%	10,70%
!Pirogues d'autres régions		9,26%	263	379	314	388	312	382
!Taux d'immigration inter-régional			22,83%	30,52%	28,42%	29,09%	26,24%	26,38%

THE ARTISANAL FISHERY OF THE GAMBIA, AND
MOVEMENTS OF FISHERMEN

by

G.V. Everett

The Atlantic coastline of The Gambia is some seventy kilometres long, and is dominated by the estuary of the Gambia River. Banjul, the capital, is on the southern side at the mouth of the river. The country's population approximates 800,000. Senegal surrounds The Gambia.

There are about 1,300 canoes of which roughly a quarter are motorised. About half the canoes are owned by foreigners, and fishing effort along the Atlantic coast is predominantly exercised by Senegalese. These Senegalese fishermen are in most instances well integrated into the fisheries sector ; some stay for long periods in the fishing villages and pay taxes to the area council where they have a compound. They do however still maintain a separate identity and in theory are not eligible for loans and other benefits available for Gambian fishermen. There is also a community of Ghanaian fishermen at Brufut ; they are said to have arrived in 1948 with their traditional dugouts : they have now gone over to using the Senegalese type of canoe, and often process fish prior to sending it to Ghana.

Table 1 : Number of canoes, frame survey 1984

	Motorised			Non-motorised		
	Gambian	Foreign	Total	Gambian	Foreign	Total
Atlantic coast	72	171	243	95	52	147
Lower river	86	21	107	474	132	606
Upper river	1	-	1	92	143	235
	159	192	351	611	327	988

Source : Robinson (1985)

The government statistics show artisanal fish catches along the lower river and Atlantic coast to be about 8,000 t annually. Canoe fishermen are also involved in the riverine shrimp fishery which yields some 250 t annually. This shrimp supplies local processing plants that export both crustacea and products such as sole fillets (caught by foreign and local flag trawlers).

The Senegalese fishermen are most active in the hot season June to November when they move to the coast predominantly to catch small pelagic fish, such as sardinellas, with purse seines. During the cool season from December to May many of these coastal encampments are deserted, as the fishermen return to be based at their home villages in Senegal. Some Senegalese (Lebou/Wolof) come down to The Gambia specifically to catch large shellfish (*Cymbium* sp.) which are then dried and sold as seasoning in food, normally back in Senegal. Other fishermen (Toucouleur) come down from the River Senegal region to use their traditional techniques for catching river shrimp, on a seasonal basis.

The European Development Fund of the EEC has been supporting marine artisanal fisheries over some ten years. It has been quite successful in supporting the entry of many traditionally agricultural folk into the fishery sector. The Italian bilateral cooperation has been supporting development of canoe fisheries in the lower river and estuarine area.

Most local fishermen are Mandingo, though few can be said to be full-fledged fishermen. There are many Senegalese women processors who handle fish from the Italian project. Other specialized fish processors are Guinean Sousou, who take the smoked fish to Conakry.

Other information of interest is the strong community of Ghanaian fishermen involved in industrial fishing, mainly of sardinellas for export to Ghana. Also of interest is the influx of a dozen or so Sri Lankans to help start up commercial shrimp farming in The Gambia.

The Department of Fisheries is the government institution which is responsible for the sector.

Reference

Robinson, M., 1985, The Gambian Fisheries Sector. Rome, FAO, FI : GCP/INT/198/NOR, 15 p.

MIGRANT FISHERMEN FROM CASAMANCE AND SOUTHERN
RIVER AREAS*

by Mariteuw Chimere Diaw

INTRODUCTION

The important role played by migrant fishermen in West African artisanal fishery is evident to all. Senegal, a country with a strong fishing tradition where the artisanal sector represents nearly 62 % of the 324.000 tons of fish landed in 1987, is generally considered as an "exporter" of migrant fishermen. The magnitude of the international migrations of Senegalese fishermen, as well as their intensive short or medium distance movements within the country itself, requires particular attention in our evaluation of artisanal fishery migrations in West Africa.

The present article, incorporating a series of studies carried out between 1984 and 1989, proposes to cover a particular area of the migrations: the movements to and from Casamance; whether they are of medium distance or length, seasonal, temporary or definite in nature, these movements affect the exchanges between different regions of the country as much as those connecting Casamance to bordering countries, especially Gambia and Guinea Bissau.

With nearly 9,470 persons divided into 4,358 fishing units, the Casamance fishermen represent more than a fifth of the national fishery workforce (1). This basic fact is radically opposed to the low amounts unloaded by Casamance artisanal fishery which represents less than 10% of the total volume of the Senegalese artisanal fishery load.

This disproportion, which is an indication of the largely occasional and "peasant" character of fishery in the region, is of the same nature as the structural differences between maritime

* Translated from French

- (1) see Diaw & alii 1989 - Technical report 4, pp 36-37
- (2) On the whole and as opposed to estuarian fishing units, the performances of maritime units nearly meet the national average as well as requiring a labour-force coefficient 3 or 4 times greater than the regional average, which is only 2 fishermen per unit. See Diaw & Alii 1989 - Technical report 2.

and estuarian fishery (2). It also reflects the unequal involvement of indigenous farmer-fishermen (3) and professional migrants in the economies of the fisheries.

1. INDIGENOUS FISHERMEN IN CASAMANCE: Origin, sedentariness and migrations.

We have already drawn attention to the ambiguity (4) of the concept of "indigenous", which includes the historical owners of the land as much as the population originating in Guinea-Bissau, to whom they are linked through multiple ethno-linguistic and cultural ties. For more practical and sociological reasons, we take into consideration the indigenous and immigrant populations originating in the historically recognized Casamance - Guinea Bissau area.

1.1 Mandingo fishermen

Massively present in Mid-Casamance, the Mandingo farmer-fishermen are the most numerous in the Casamance fishery sector. They represent 36 % of the heads of unit in the region and nearly half of the indigenous work-force. The Mandingo presence is dominant within the largest fisheries in their natural habitat (5). This is the case particularly with regards to the types of cast-net fishing (46 % of regional work-force) shrimp-net (41 %) and drift gill-nets, féfé-féfé (34 %). Apart from a minority of units formed with the aid of public financing (groupe GOPEC de Marsasum) or from exterior sources which we observed in the border village of Bujejet (Guinea-Bissau) and in Cap Skirring, the Mandingo fishermen are of sedentary nature, working within a limited range inside the estuary.

1.2 Joola fishermen

Accounting for nearly 30 % of the regional fleet, the Joola farmers from lower-Casamance form the second group dominating the area. Between them, the Joola and Mandingo groups represent some 2855 fishermen responsible for nearly 66 % of the regional fleet and 83 % of indigenous units. Contrary to the Mandingo community, the Joola presence is very strong not only in fisheries of typical estuarian practice, (11 to 53 % of the units)

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- (3) Four out of five heads of unit in Casamance are indigenous, but their catches and crews are smaller and their fishery specialization less pronounced than those of migrants. Diaw & alii, *ibid*.
 - (4) Diaw & alii 1989.
 - (5) This is what we termed "geographical détermination" with regards to technical specialization of indigenous fishermen communities. Diaw, 1989, p.46.

but also in the kinds of fluvio-maritime fishery carried out and dominated by them. This is particularly the case of the bottom-set driftnet "yolal" (64 % of the units), the "kaya" barrier (91% of the unit) the "armandinga" long-line (77 %) and the line (6). Even in the case of the set net, favoured by migrant fishermen, the Joola heads of unit equal the Lebu fishermen, by controlling a third (29 %) of this kind of unit (7).

The Joola fishermen also form the indigenous group the most strongly represented in sea ports, (15 % of the fishing population). The increasing importance of indigenous fishermen among the coastal fishing units is the most noticeable evolution in the maritime fishery sector in the 1980's.

1.3 Balant fishermen

Accounting for 8.4 % of the regional fleet, the Balant heads of unit form the third indigenous community implicated in fishery and the fourth, after Tukulër migrants, on a regional scale. Like the Mandingos, the Balant fishermen are sedentary and their presence on the coast practically negligible and certainly no longer than that of other Bambara or Pël (Fula) minorities, for example. Their confinement in estuarian fisheries is even more noticeable than with the Mandingo fishermen. In fact, 99 % of Balant units divided among the different types of estuarian fishing practised.

1.4 "Integrated" Bissau-Guinean immigrants.

The main characteristic of immigrant fishermen from Guinea-Bissau during this century is that their insertion within the Casamance fishery sector reflects the movements of population largely overflowing the fishery framework. It concerns "migrating peoples" and not "fishery migrations" (8), and these populations who, in most cases, learnt to fish in Casamance itself, and are neither maritime (9) nor fluvio-estuarian "nomads".

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- (6) 7 out of 14 units recorded in 1985, not counting the Getndarien units recently arrived on the scene, which use true sea-going canoes whereas the usual lines found in the Joola milieu are estuarian, their seaward excursions being confined to around the river-mouth.
 - (7) As for line fishing, however, this type of fishery is carried out within the estuary and does not compare, except in minor cases, to active sea-fishing.
 - (8) See Diaw 1983 for a typology of the different migratory movements and Diaw 1985 for analysis of population movements between Guinea-Bissau and Casamance.
 - (9) According to M.C. Cormier 1985.

From a sociological angle, this immigration is founded on essential ethno-cultural affinities between the three main groups - Mandingo, Balant and Joola - and the Casamance fishermen. As far as the first two are concerned, Bissau Guinean immigration is second-generation in type (10), mingling with basic Mandingo and Balant peopling. As we were able to establish in many fishing villages in Mid-Casamance, the involvement of these groups in the fishery economy presents the same characteristics as those of the indigenous populations they have integrated into.

Those Joola fishermen originating in Guinea-Bissau belong almost entirely to the Joola-ramé subgroup and come from Guinean villages such as Niabane, Eramé, Elya Sisana or Kaware. Our studies in 1984 and 1985 concerning 11 female oyster-gatherers, as well as 13 Joola-ramé fishermen at landing points in Ziguinchor, give us interesting information about them. It would appear that the women, whose average age is 42, are mostly refugees who came on foot between 1959 and 1974, during the war for the liberation from Portugal. Nearly all of them were already in their thirties when they arrived in Casamance and today consider themselves as permanent residents of Ziguinchor.

Having low incomes and being generally without property, however, these women do not benefit from the same conditions as the local Joola and most of the time they are obliged to rent their canoes as well as their rice-fields during the wet season. As for the fishermen in the strict sense of the term, they belong to another generation and could be the gatherers' children. 27 years old on average, they also arrived during the war but were young at the time (8-10). Some were born in Ziguinchor after their families settled there. All consider themselves permanent residents. One should note that they are all catholic as opposed to the gatherers who term themselves animist. These Joola-ramé fishermen, like the latter, are rice-growers and are obliged to rent their canoes for 200 F CFA a day, even though they are generally the owners of the fishing equipment. Their economic set-up is influenced by their links with and sometimes their dependence on Nyominka fishmongers in Ziguinchor.

2. MIGRANT COMMUNITIES AND THEIR HISTORICAL ROLE IN THE DEVELOPMENT OF FISHING IN CASAMANCE.

Historically, seven migrant communities have dominated the Casamance fishery scene. These are Nyominka fishermen from the river mouth and ambivalent areas, the Tukulër, Waalo-Waalo and Somono fishermen from the estuary, and Wolof, Sereer and Lebu sea-faring fishermen, originally from St. Louis, the Petite Côte and Cap Vert. We wish to rapidly underline their role in the considerable expansion that the fishery has known in the 20th century as well as their main present day characteristics.

(10) See Diaw, 1985 pp.79-89.

2.1 Nyominka migrant fishermen

Originally from the Salum Islands, the Nyominka sailors are excellent navigators and tradesmen, carrying out commercial exchange with Casamance and Guinea Bissau as far back as 700 AD (11). Up to the middle of the 20th these commercial and transport activities took them all along the Atlantic Coast, as far as to Nigeria (12).

Only at the end of the 19th century did their fishing campaigns in the strict sense become important to them because of lack of freshwater and landspace on their islands, added to insufficient locally produced food.

From the 1880's (between 1890 and 1924), the first Nyominka and Lébu migrants introduced the use of the cast-net in villages in lower, then Mid-Casamance, during the dry season campaigns. Up until then, the Joola farmer-fishermen in lower Casamance had ignored the sea, concentrating on "intelligent" techniques, perfectly adapted for use in the estuary and their rice growing priorities in their economic set-up (13). The involvement of other indigenous groups in fishing was only marginal.

As from the end of the 30's, the migrant Nyominka spread to lower Casamance, in the fluvio-marine area they greatly favour. Thus they settled in Elinkin, Joge and Ziguinchor, set up seasonal camps on Pointe Saint Georges and the permanent fishing village of Bujet on the Guinea-Bissau border. The men use beach seine (mullet transformed into tambadiang) as well as the gill net and cast-net. Some have recently acquired canoes equipped with ice-boxes and tend to turn towards supplying large species to the fresh-fish dealers in Ziguinchor. The women take care of the cooking and process the unsold larger species into gejj (dried fermented fish).

From the sociological point of view, some distinction should be made between two Nyominka subgroups whose migratory strategies diverge somewhat from about the beginning of the century. In fact, migrations of fishermen from Bosul and Jogaan have continued to follow the periodical movements determined by alternating between the fishing season in Casamance and the farming season in the Salum Islands, in spite of nearly 30 years presence in Casamance. Their two camps on Pointe Saint Georges, founded nearly 30 years ago by a fisherman fishing in Guinea as well as in Casamance, remain sites of a seasonal nature occupied by some 800 persons who leave en masse with the approaching wet season.

(11) According to Linanes de Sapir, 1971

(12) According to Van Chi Bonnardel, 1977.

(13) See Diaw 1986-a

However, the movements of Nyominka fishermen originating in villages such as Jonewaar, Jirnda, Ibakuta, Niojoor and Sam, are only directed towards sedentary villages in Casamance. They occur in the framework of long term movements in search of fish and new settlements and thus tend to become permanent. One unit we met in Bujejet for example, is made up of fishermen who have been in Casamance (Bodé, then Sancaba-Manjak) some three or four generations. Similarly, in Elinkin, where they represent more than half the work-force, 78 % of the Nyominka migrants have been sedentary for at least thirteen years. The only seasonal Nyominka in the village are in fact fishermen from Basul. The same trends are found on other sites in the estuary.

2.2 Tukulër, Waalo-Waalo and Somono: from itinerant river fishing to sedentary immigration.

The Tukulër and Waalo-Waalo fishermen, originally from the Senegal river valley probably came to Casamance prior to the 1940's in search of skins of manatee and crocodiles, which they hunted with harpoons at that time, and also for Casamance dugout canoes. The latter were then transported by ship, rail and riverboat using the Ziguinchor-Dakar-St.Louis-Futa or Waalo route. The movements of the river valley fishermen at that time were clearly migrations of an individual nature, seasonal or temporary centred on the point of origin.

As from the end of the 40's, the migrations originating in the Senegal river valley become systematic. The arrival of Tukulër fishermen, followed by Waalo-Waalo, coincided with the development, from 1948 on, of a flourishing smoked fish processing and commercialization industry directed towards Guinea Conakry. Based in the Balantakunda, this industry created intensive fishing and exchange activity, up until the closing-down of the Senegalo-Guinean border in 1988. It encouraged the development of fishermen immigration, but also the insertion of new social categories (Susu processors and Pël, Malinka, Jula or Jaxanke tradesmen) in an expanding estuarian economy.

Between 1950 and 1960, the Tukulër Subalbe make a decisive impact on the physionomy of estuarian fishing by spreading the use of the kind of féfé-féfé found in the river valley. The féfé-féfé for pompano, bonga, mullet and tilapia were thus introduced into the Balantakunda and even into the Buluf where they are also to be found, at Conk-Exil and Tendouk, as of 1953.

Moreover, and in spite of Nyominka anteriority in the estuary, the Wolof Waalo-Waalo from Gaya and Jawaan in the Waalo (lower Senegal river) who are unquestionably responsible for the diffusion of beach seine in this period. These seine fishermen began settling in the region in 1951, primarily on the banks of the Soungrougrou in the framework of seasonal campaigns in Casa-

mance from January to May, then on the Petite Côte (14) the rest of the year. This migratory rhythm was probably imposed upon them by technical difficulties (15).

The rapid expansion of shrimp fisheries following the installation of three European processing plants between 1950 and 1961, together with the belated spread of nylon line between 1971 and 1975, the Tukulër migrations on the one hand and those of the Waalo-Waalo on the other, was totally upset.

Seine fishing became technically possible all year round for the Waalo-Waalo who became sedentary as a result. The seine fishing campaigns in Casamance spread over the whole year and the fishermen built houses of a permanent kind in centres such as Gudomp, Jatakunda, Bambandi Biassu, Marsasum and Sedhiou where they became permanent residents. However, they maintain the connection with their native village, going back there for festive occasions.

As for the shrimp economy, it rapidly takes over from all the other kinds of fishery and the Subalbe fishermen have converted massively into it. Active networks have been set up to encourage immigration and organize host structures to receive the family groups coming from the Futa. The new sector is organized around a complex formed by factory owners, "gatherers" and fishermen. The domestic relationships which regulate the direct production sphere are articulated and subordinated to the trading relationships which connect then to the factory production. The Tukulër intermediates are progressively transformed; their role as "gatherers" and "scale managers", with whom the factories prefer to deal, takes over from that of fishtraders.

The Somono migrants, originating in Mali, became sedentary in Casamance prior to the river valley migrants, between 1930 and 1950. At that time they settled in villages or small towns (Séju) in mid and even lower Casamance (Bodé) where they formed small distinct family units. At the beginning of the 30's, they introduced the féfé-féfé as used in Mali, which was the first drift net to be used in the region (16).

(14) Where they enroll on Waalo-Waalo sea-seine campaigns in Dibouk.

(15) The spools of cotton and tlix lines used at the time rotted rapidly during the wet season.

(16) According to M.C. Cormier-Salem (cf Diaw & alii 1989), the first Somono migrants could have been present in Casamance as early as 1885.

With Séju as a base-camp, the Somono migrants carried out campaigns lasting 4 to 5 months, using canoes with sails, all along the estuary. The fresh fish (carp, threadfin, barracuda, bonga) were sold in Séju and Kolda and even as far as Velingara in Upper Casamance, with the acquisition of a vehicle in 1949. These internal migrations have somewhat fallen out of practice today and the fresh fish is now sold through fishmongers from Kilda or processed there by the fishermen's wives and other women from Séju. Competition and the difficult nature of the work has caused the younger generation to turn away from fishing, towards Dakar and job possibilities there.

2.3 Sea-faring nomads and the development of fishing centres on the coast.

2.3.1 Lébu fishermen from Cap Vert

Only as from the 50's did the Casamance coastline begin to be used seasonally worked by migrant fishermen from North Senegal, after more than half a century of intensive exploitation of the estuary. The Lébu fishermen, whose historical role in the estuary is known as from 1880-1890, were among the first to colonize the Atlantic coast. One of these pioneers, who has been working the area without interruption these last 34 years, can still be found in Abene and Kafuntin, which were the first sites settled. This north-south movement falls in with their general pattern of migrations which, at that time, first took them to the Petite Côte, then to the Gambia, before reaching North Casamance.

From the beginning of the 1960's, the centre of Cap-Vert Lebu migrations moves towards Jembereng and Cap Skirring, owing to the movements of lobster and the development of a profitable market for this species in southern Casamance (17). The camps in this area became more important than those on the northern bank.

On the whole, however, exploitation of the coastline was not very pronounced during this period. The beaches were more or less neglected for nearly 20 years. Moreover, the fishermen from Yeen, who were practically the only occupants, did not all use the same site systematically and sometimes changed their campaign area to go to the Petite Côte, to the Gambia and even to Mauritania. Only as from the end of the 60's did new populations from Ganjool and Get-ndar begin exploiting the area along with the Lebu, in seasonal camps on the coast, particularly in Kafuntin. The Lebu, on the other hand, diversified the location of their camps. The majority of them (91 %) come from the Yeen village (Yeen-Kaw and Yeen-geij) and they are to be found in all coastal centres, forming the second ethnic minority on the coast, the first being the fishermen from Saint Louis.

(17) See Diaw (1985)

2.3.2 Wolof fishermen from the St. Louis region

Present in Casamance since the First World War, the Get-ndar fishermen are responsible for introducing the set net for threadfin in the villages bordering on the Balantakunda. In spite of their sea-faring experience, these seasonal fishermen did not go out to sea nor did they frequent the estuary mouth. Their stay in the different estuarian centres was confined to dry season campaigns which lasted until April(18). This type of migration remained significant for about twenty years and as from the Second World War, the Get-ndanian fishermen left the Casamance estuarian area. They move on to Guinea where they supplied the Conakry market up until 1944. Following a dispute with the colonial administration concerning the fixing of fish prices, the Saint Louis fishermen left Conakry for Sierra Leone (then British), leaving the town in a state of serious shortages. This migratory swing to the south takes them as far as the Ivory Coast (Abidjan) at the beginning of the 1950's.

Back in Casamance since the 1960's, but exclusively on the sea-front, the Saint Louis fishermen originally from Ganjool (18%) and Get-ndar (24%) together form the largest ethnic community on the coast today. In order to situate their distribution in the space context, it should be noted that these fishermen are only to be found nowadays in two centres (Kafuntin and Cap Skirring) where their presence is inversely parallel.

In fact, it is in Kafuntin that the majority (82%) of the Ganjool-Ganjool units are to be found, compared to 18% in Cap Skirring, whereas the majority of the Get-ndar canoes are based in the latter centre compared to only 20% in Kafuntin. This situation reflects the "cluster" phenomenon which marks the spatial organization of West African migratory movements.

2.3.3 Migrant fishermen from the Petite Côte

Lebu, Sereer and Wolof fishermen(19) originating on the Petite Côte are also to be found in all the active coastal centres. Coming from towns and villages such as Niaming, Ngnapasu, Mbani, Joal or Pointe Sereen, the Petite Côte fishermen are Sereer in the majority (nearly 61%) with a small number of Wolof (about 15%). This year, the Sereer fishermen from Niaming and Mbani confined their campaign to Jembereng, whereas the Lebu and Wolof, fewer in number, worked in Cap Skirring as well as Kafuntin for the first and Jembereng for the latter. The Sereer fishermen from the Petite Côte are also to be found in the estuary among the sedentary migrants of Elinkin village where they have been settled for nearly 35 years.

(18) Gruvel, 1907.

(19) There is in fact a small minority of Lebu to be found

3. FISHERY AND MIGRATORY STRATEGIES

3.1 Growth and dynamism of the maritime flotilla

Four stages of development may be noted :

- 1) The first covers what may be called the "settlement" phase of these migrant fishermen on the Casamance coastline (cf section 2.3). No statistics are available for this period as a whole. However, analysis of our reference group (20) shows that this phase probably lasted all through the 1960's and into the beginning of the 1970's. During this period lasting about 15 years, 31 % of the migrants we questioned in 1988 actually started their fishing campaigns in Casamance. These arrivals are well spread out in time, averaging 2% of the reference group per year.
- 2) The first significant increase in the maritime flotilla took place in the second half of the 1970's and lasted into 1982. During this period and within our group, the average annual increase in the number of arrivals leapt to 5 %, with a pronounced increase probably situated between 1975 and 1978 (10 % of the group). The information available from the Kafuntin centre, where the flotilla increased eight-fold in the space of nine years (1973-1982), confirms the elements of this periodization. In 1973, there were no more than 8 canoes for sea-fishing, originally from Get-ndar, Tasineer and Dun Baba Jeey in the Saint Louis region and the Lebu communities from Yeen (Cap Vert) and Salin on the Petite Côte. From that period on, a few resident Mandingos from the village and from Janna learnt sea fishery from these migrant fishermen. In the years that follow, they form the first indigenous units in Kafuntin. The 1970's, particularly from 1973 onwards, witness the first leap forward of maritime fishing in Casamance, thanks to the rapid growth of the first fishing centre in the region.
- 3) The third important period in the growth of maritime fishing is marked by the large increase in the flotilla in 1983. The statistics obtained through a six-monthly census which the CRODT began carrying out all along the Senegalese coast as from the year before (1982) clearly reveal this phenomenon. On the scale of the coast as a whole, the flotilla in fact increases from 80 to 135 units between these two seasons, an increased in manpower of about 60 %. The side effects of this phenomenon were still being felt the following year as the flotilla rose again to 150 units in 1984, an increase of 11 %.

(20) cf 100 fishermen in 1988; cf Diaw, 1989.

In the meantime, indigenous fishing units, still much in minority and created with external financing, came to join the traditional migrant units already present on the beaches. This phenomenon represents one of the most remarkable trends of the 1980's, which should in any case be put in perspective with the situation in keeping with the situation in the estuary in mind.

- 4) Since that period the fleet, after reaching a maximum of 158 units in 1985, has fallen back to and remains at 1984 levels (155 units in 1988). This stagnation is the main characteristic of present times.

3.2 Spatial mobility of the fleet and inter/intra-annual fluctuations.

One of the principal characteristics of the fishery centres is the great variability to be found in the size of the canoe fleet from one year to another or period of the year to another. This variability of the maritime camps contrasts with the relative stability of the labour-forces in the estuarian centres. This is undoubtedly linked to the mobility of the non-resident components and the adaptability of the fishing strategies used by this migrant population.

In those centres in the estuary, the relative inter-annual stability of the labour-force is linked to the low level of migrants from the north operating in Casamance on a seasonal basis. However, this stability does not mean that the fleet remains static. At Elinkin(21) for example, the canoe fleet increased by 50% between April 1984 (18 units observed) and April 1987 (27 units), after remaining more or less stable between 1982 and 1984. The figures should be treated with care, however, as they do not take into consideration the intra-annual variations of the canoe fleet. Between April and May 1985, for example, the Elinkin fleet increased from 27 to 35 units, that is by 18%. The fact that this year (1988) the fleet only numbers 35 units (for 26 heads of unit) tends however, to confirm the slow progression of the fleet as well as its relative stability.

It should also be noted that all the migrant fishermen surveyed in the estuary have fished in their host centres since they settled, without interruption. In addition, the 1988 analysis of the stay of heads of unit in their respective centres shows that 95% of the estuarian heads of unit have been there or intend to remain there for 12 months or more. Finally and at the time of our study finally, 82% of these declared their intention to stay even longer on an unlimited basis.

(21) This is a village for which data on the canoe fleet exist since 1982, contrary to the majority of fishing villages in the estuary.

In the maritime centres, the situation is more complicated. On one hand, the study reveals that the movements of fishermen in the maritime centres on the whole present a certain regularity. In fact, 87 % of the migrant fishermen have been frequenting the area since the beginning of their migrations in Casamance, without interruption, while 85 % of the heads of unit intended to in 1980, to stay a total of 9 to 11 months, (between the beginning of October and August). If one adds those who declare to have come for very long stays (from 12 months to unlimited stays) this percentage rises to 95 % of the heads of maritime fishing units.

Analysis of statistical or qualitative information gathered over several years tends to show another aspect of maritime migration: their great inter and intra-annual variability as well as their flexibility. The study of the evolution of the fleet by centre between 1982 and 1985 is, in this respect, full of interesting information. During this period, in a centre such as Cap Skirring for example, all the fishing units left, (8 gill netters for sole and lobster in 1983 and 1984) owing to pressure from the hotel trade which declared itself hindered by artisanal transformation and got support from the administration. At the same time, Bukot village flourished (54 gill netters in 1983) as a privileged settlement site for the fishermen from Get-ndar, Tasineer, Dan Baba Jeey and Pilot in the Ganjool, Wakam (Ouakam) in Cap Vert and Jonewaan on the Petite Côte. Contrary to what might be thought, this new settlement-much bigger than Cap Skirring - did not come about through a simple transfer of activities to a new host site. The fishermen from Bukot came from Cap Vert as well as Kafuntin and the Gambia, where the fishing campaign got off to a bad start that year. One could even find canoes belonging to the GOPEC group from Kafuntin as well as Ghanaian units.

In 1984, owing to many difficulties caused by Bukot's hemmed in situation and the danger to navigation in the area, the fishing population of the new camp fell drastically. Only 25 units from Saint Louis could be observed there that year, all originally from Tasineer. On the other hand, the Jembereng fleet which had remained quite insignificant until then (4 gill netters in April 1982, 8 in March 1983 but only one in April 1983) increases rapidly between March 1982 (11 units) and May 1984 (49 gill nets).

The rapid growth of Jembereng is directly linked to the mass arrivals of Lebu fishermen originally from Yeen and Naning, as well as Pointe Sereer and Ngapara on the Petite Côte who had previously settled in Kafuntin and left this camp in pursuit of large shoals of sole and lobster sighted further south. It is evident that at the same time, the Kafuntin fleet was reduced and fell from 100 units in April to 75 in May as a consequence.

In April 1985, the Jembereng fleet fell once more to its lowest level (a mere 2 units) while, following an agreement with the administration, the fishermen came back to Cap Skirring and the fleet increased to about 50 units. Examples of the same nature could be given at leisure (22). Their merit is to outline clearly the enormous ability of adaptation of maritime fishermen who confront ecological and socio-economical difficulties in order to maintain their production rate as well as the profitability of their operations. They also show the fundamental nomadic character of maritime fishery: "mool dëkkul fenn" (23).

The Casamance maritime fishermen thus have a wide range of action. As most of them arrived by canoe in a north-south movement, their fishing-grounds stretch from Gambia to Guinea Bissau. Among those migrant units refuelling in Kafuntin in 1984 (24), 88 (that is, 58 %) were based in the Gambia. These are Lebu fishermen settled in Sanan, Katon, Brufut and Gunjur; fishermen from Saint Louis, nearly all based in Gunjur; fishermen from the Petite Côte (Gunjur, Katon) and fishermen from Taré village in the Larga region, quite absent in Casamance and all settled in Gunjur for the fishing season.

Guinea-Bissau is also much frequented by Casamance fishermen. As in the Gambia, their fishing trips last from one to several days (gill-netters from the Cap and Bujejet, Get-ndar liners with ice-boxes from Ziguinchor), and set up seasonal camps for a certain number of units. Among these, special mention should be made of migrant Nyominka, but also of Joola units originally from Conk-Esil which arrive in the area around Rio Cacheu at the end of the harvest, that is in October, and stay until April. On the outward journey as on the return, these units transit in Bujejet where they sometimes remain a few weeks. In May, nearly all the units from Esil group together in the rivermouth (Joge) where they remain until the wet season and sometimes during a good part

(22) Individual itineraries are also full of information. For example, the case of a Lebu fisherman from Yeen who comes to Cap Skirring on a regular basis since 1965 (briefly stopping in Aléné at the beginning of the lobster season) and tends to remain on the Cap well beyond the dry season - "as long as there are lobster to catch and sell", and also fishes in Jembereng and into Guinea-Bissau. Another Lebu fisherman who settled in Jembereng in 1975 and whose campaigns between 1963 and 1974 successively took him to the Cap, Joal, Abéré, Jembereng, Mauritania, Mbour and back again to Joal.

(23) "The fisherman is an eternal vagrant"

(24) Information gathered at the DOPM check-point in Kafuntin.

of it as well. The active and elaborate nature of Conk-Esil fishermen maritime migrations is one of the best indications of the possibilities of transition from estuarian fishery to maritime fishery for indigenous Casamance units.

CONCLUSION

The present study was purposely confined to distinguishing the forms of mobility induced by fishery migrations in Casamance and to identifying the trends and main periods which characterize their evolution. However, we are aware that migratory phenomena are not just simple movements, but imply a change in social conditions (25). In Casamance, as elsewhere in West Africa, the migrations also imply diverse socio-economical and cultural arrangements that vary according to the kind of migration carried out, settlement difficulties in host camps and villages, the ethnical and geographical origin of the migrant fishermen, their level of specialization and the relationship existing between fishery and other activities not linked with fishing. These different arrangements cover a vast area of research which stretches from phenomena of adaptation to techno-ecological difficulties, forms of domestic organization, new relations of production and exchange relationships, those existing between the male and female population, systems of share and accumulation, and everyday life in general (26).

The impact of these migrations on indigenous social structures is also considerable. In Casamance, where they have brought about the fundamental technical mutations of the present century, the massive presence of "countrysidepeople" has accelerated economical as well as cultural and social exchanges thus promoting a new perception of the maritime space, seen nowadays as an enormous source of wealth awaiting exploitation. Over the last 10 years the involvement and growth of internal and international migrations has been observed, especially in Guinea-Bissau. We have emphasized (27) that the limits of such involvement are mainly centred on: 1) the possibilities of pursuing estuarian fishery in spite of increasing pressure on the resource itself; 2) the greater compatibility between estuarian fishery and the multiform - integrated character of indigenous systems of production; 3) the difficulties of reconverting to sea fishery; 4) the limitations of fishery development projects; 5) low level of indigenous/migrant integration within the crews themselves, which are privileged ground for acquiring technical and practical knowledge.

(25) See Diaw 1983.

(26) See on the subject of Casamance: Diaw, 1985, 1986b; Cormier 1984.

(27) Diaw 1989.

The future of the fishery and the fishery migrations in Casamance is situated, it should be recalled, within a global north-south movement of professional communities from northern Senegal, and is therefore determined by the development of a contradictory and complex situation as much dependent on political contexts (Senegalo-Mauritanian and Senegalo/Bissau-Guinean crisis), development policies (projects) as on the evolution of markets, societies or even climate (in the case of agriculture).

Table on Technological Changes in Casamance Fisheries

NATURE OF TECHNOLOGICAL CHANGES	REFERENCE DATE	INNOVATING POPULATION
Precolonial techniques of trap fishing, gillnetting and casting gear; fish basins, barriers and trap fences; baskets and accessories.	Before 15th to 19th century	Joola of lower Casamance
Cast-nets	1880	Lebu, Nyominka
Gill net (for threadfin)	1st - 2nd World War	Guét-Ndars
Malian Félé-Félé	1930	Somono
Tukulër Félé-Félé	1945-1950	Cubalo-Tukulër
Estuary beach-seine	1951	Waalo-Waalo
Motorisation	End of 1950s to 1960s	Maritime and estuarine migrant fishermen
Shrimp fishery	1960	Cubalo-Tukulër, French enterprises
General use of nylon twine (beach seine)	1971-73	Waalo-Waalo
Purse seine	1980-82	Guét-Ndars, Manjak = failure
Purse seine	1980	Projects with locals
Line fishing at sea	1980-82 and 1987	Guét-Ndars

From Diaw & alii. 1989.

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NOTES ON FOREIGN MIGRANT FISHERMEN IN GUINEA*

by Stéphane Bouju

INTRODUCTION

Guinea has been inaccessible to research these last 26 years, therefore very little data is available on Guinean and foreign fishermen working the E.E.Z. (exclusive economic zone). During our first stay in Guinea, we became interested in these groups of foreign fishermen, seeing them as a means to understand the different fishing strategies used by native fishermen, the respective specificities and the capacity of adaptation of Guinean fishermen with respect to imported technical and technological features.

We have adopted P. Jorion's definition of the term "migration" (1988)(1). The author distinguishes two types of phenomena:

- seasonal movements
- migrations strictly speaking which lead to settlement in a host region or country during a long period (several years).

We hereby propose to study two communities of migrant fishermen to whom the definition applies.

The first note concerns two groups of Senegalese fishermen carrying out seasonal fishing campaigns over several years along the north Guinean coast. We made two short missions to the camps installed near Sakama and Dobiré villages, in April and May 1990, just before the fishermen returned to Casamance.

The second note is a collection of information obtained during our investigations on the Conakry landing beaches. These repeated investigations, started in January 1990, did not specifically concern migrant fishermen but all participants in artisanal fisheries. In the capital there is a large Sierra Leonean community carrying out intensive fishing, with very dynamic production units. These fishermen play a fundamental role in the evolution of the canoe fishery in Guinea, and are very diversely implicated in the migratory phenomena.

1) P. JORION "Going out or staying home. Seasonal movement and migration strategies among Xwla and Anlo-Ewe fishermen". MAST vol.7 N° 2.

* Translated from French.

In these notes we have approached - even if only summarily at times - the following themes:

- ethnic composition of the groups of fishermen
- the different fishing units (types of canoes, motorization, crew composition)
- the techniques used (type of net, work organization, target species, fishing techniques)
- social organization of the different communities (socio-hierarchical structures, economic organization of the activity, cultural practices and beliefs)
- the relationships existing between the native and foreign fishermen (conflicts, cooperation, transmission of knowledge and know-how).

NOTE N°1: SOCIO-ECONOMICAL ORGANIZATION OF SENEGALESE FISHERMEN ON CAMPAIGN ALONG THE GUINEAN COASTLINE, THE EXAMPLE OF SAKAMA and Dobiré camps.

North of Conakry, the Boffa prefecture is crossed by the Rio Pongo (Fatala). This river runs to the sea some ten kilometres further downstream after making its way around the many islands in its estuary.

On two of these islands, migrant Senegalese fishermen of Casamance origin have been coming to settle in recent years for fishing campaigns. During 7 or 8 months they occupy camps built on the outskirts of Sakama and Dobiré villages. The Guinean fishing campaign starts in December/January and ends in June/July.

We are confronted with two groups, often quite similar in some respects (fishing devices, type of craft, capture techniques used) and different in others (religion, length of presence in fisheries, family ties within the fishing units, social organization of the camp).

1) Historical background

According to the oldest migrant fisherman - Mohamed Saar - father of Sakama camp's present chief, Senegalese fishermen have been migrating to Guinea since before colonial times. At that time, the canoes were under sail and paddle power and the gear used to fish bonga (*Ethmalosa*) along the beaches were the small-meshed surrounding gill net and a net much like today's castnet. This coastal fishery required simultaneous work of two groups of men.

The campaigns in Guinea were totally stopped during the 1st Republic. Some fishermen stayed in Senegal, others left for Guinea-Bissau or Mauritania. As soon as the new regime took office (1984), the migration to Guinea resumed. The first year

the fishermen settled near Kamsar and the border with Guinea-Bissau, but other Senegalese came to Sakama. They left Kamsar for Sakama three years ago.

Up until 1989, only the Sakama camp existed, some Sakama fishermen using the Dobiré fishing-grounds. That same year, Ansou Diala, the Dobiré camp chief, requested permission to settle on the territory of the Baga village. Following this, he contacted the harbour master. Upon agreement of the two, he went to see the Boffa prefect so as to obtain definite authorization. The Senegalese fleet at Dobiré then comprised 4 craft and in 1989, seven huts were built on cleared land near the beach. In 1990, there are 10 huts and 6 craft in all. The Dobiré camp, contrary to that of Sakama, is isolated from the Guinean village by very thick mangrove vegetation, with direct and independent access to the sea.

The Dobiré fishermen coming from Sakama carried out their first campaign in Guinea in 1987. In 1981 and 1982, they were in Guinea-Bissau, near Bissau. During 1984, 1985 and 1986, they stayed in Senegal, near home. Then in 1987, they arrived in Sakama.

The historical background of fishing campaigns throws some doubt on the hypothetical exhaustion of fish supply in the country of origin as the main explanation of the Senegalese migratory phenomenon. The decrease in canoe-fishery productivity in Senegal has yet to be proved. If this were the case, it would be relatively recent and would not explain the migratory phenomena of the beginning of the century. Although it is true that Senegalese fishermen declare that fish are more plentiful in Guinea than in their own country, this was certainly not so evident one hundred years ago. In fact, the Senegalese were coming to Guinea during colonization and according to some, since well before the arrival of colonists.

It would be interesting to know who these migrants were (people from Casamance certainly, but from which ethnic group?) and study the role of migrations from the point of views of socio-hierarchical positions in the society of origin as a whole. For example, is the status of campaign camp-chief in correlation with any specific status in the society as a whole? Is he recognized as such by members of the community in his home village?

How is the product of a campaign shared out among the members of the extended family, when they are far from the village and its social obligations? Is it reappropriated by the head of the family? Are ostentational expenses made so as to acquire social prestige?

In my view, all these questions remain unanswered. However, considering the ancientness of Senegalese migrations to Guinea,

it is essential to take into account the "social tradition" aspect of these migratory phenomena and not focus merely (as is often the case) on economic opportunism aimed at a supply that has not been exploited to an optimum these last twenty years.

2) Campaign preparation

In Senegal, preparation for the campaign lasts one month, starting just after the rainy season (October/November). The canoes are repaired, caulked, repainted and the motors overhauled. The Sakama fishermen made the journey in groups of two or three canoes whereas the Dobiré fishermen travelled together so as to give help in the event of a problem. The latter group took 3 days and nights. The first landing took place on the Bijagos islands in Guinea-Bissau and the second at Kamsar/Kachek in northern Guinea.

The Senegalese arrive with their own fuel, (which they consider of better quality and cheaper), a stock of rice and their own salt which they prefer to Guinean salt. They also take sufficient money to meet all expenses related to their installation. Two barrels of fuel are kept aside by all for the return journey (400 litres per canoe).

3) Organization of fishing

3.1 The canoes

The canoes used are known as "yolis". These craft are immediately recognizable from their double stern fore and aft, which make them extremely seaworthy. The wood used is "Kaïcédra", a red wood which is machine-cut into long planks of regular thickness and width. A few planks set crosswise form benches. A central well situated aft accommodates an outboard motor of 15 to 40 hp. The detachable rudder is placed to the left at the back of the craft.

The "Niominka" are carpenters specializing in the construction of these craft, which seem to be much longer-lasting and have superior marine capabilities compared to the Guinean canoes.

3.2 The nets

The nets known as "yoeal" (Wolof), about 900 metres in length, are drift gill nets with a weight (a brick) every 8 metres on the lower lead-line. The floaters are not round but more of a melon-shape. Buoys placed every 20 to 30 metres on the surface draw attention to the net. It is set in open water at about 2 metres from the surface. Its mesh-size is generally 80 mm.

3.3 Species sought after

The large species are particularly sought out:

- sharks of medium-size (1,50 to 3 metres) (*Rhizoprionodon acutus*)
- African hammerhead shark (*Sphyrna couardi*)
- guitar ray (*Rhinobatos* spp.)
- daisy stingray (*Dasyatis margarita*)
- Cat fish (*Arius* spp.),
- Senegalese jack (*Caranx Senegallus*),
- croakers (*Pseudolithus senegalensis*, P. Typus. P. *Brachygnathus*)
- Guachanche barracuda (*Sphyraera guachancho*),
- royal threadfin (*Galeoides decadactylus*),
- giant African threadfin (*Polydactylus quadrifilis*),

3.4 Organization of fishing unit.

The basic production unit is composed of :

- an owner (always present in the camp)
- his motorized craft
- 4 crewmembers per craft
- one or two nets on board which are set end-to-end at sea.

Out of the four crewmembers, only three embark; the fourth stays on land to rest and to look after the catch once it is landed. The crew take turns to fulfill this function. The owner does not embark too fish unless there is a problem to be settled.

According to the Senegalese fishermen, there is no real hierarchical distinction made among them when out fishing. The captain is there merely to coordinate the manoeuvres and each one may propose the fishing spot and the best time to put the net out. If there is no opposition, the first one to make a choice will be followed by the others.

In reality, as we saw when on board, one of the fishermen, owing to his experience and no doubt also to his personality, informally directs all the fishing operations. The others had learnt their profession with him and left him with the responsibility of the manoeuvres and fishing operations.

Socio-professional hierarchy within a Senegalese fishing unit is thus different from that studied within the Guinean and Sierra Leonean groups. In addition, this hierarchy does not appear formalized in the Senegalese fishermen's conception, as they seem to set a high value on a certain form of egalitarianism with respect to tasks and responsibilities. However, in reality, it would appear that the eldest, having the most experience, is generally the leader in navigational and fishing operations. This appearance of socio-professional equality is very surprising in

an activity which generally generates a role hierarchy and great diversities and complexities in status. It seems important to me not to draw any conclusion to this particular aspect of the study; especially as the owners questioned, who do not actually embark, all pointed out the captain of each canoe as their preferred interlocutor in conflicts with the Guineans or other problems encountered met in the execution of the activity as a whole. It is therefore necessary to examine more thoroughly the role and status of these captains.

3.5 The fishing operation.

The Senegalese fish at night; the craft leave the camp around 16H and reach the fishing-grounds between 18H and 18.30. All the fishermen have a life-jacket and there is a compass in each canoe.

The setting of nets is completed just after sunset at the latest. When night falls the different craft signal to each other by means of flashlights and the fishermen settle down for the night using their life-jacket as a mattress. The net serves as a floating anchor and the canoe always has its boats set to the wind and current, running with the tide. The net is lifted at first light.

One and a half hours are needed to pull in the net and remove the fish. Everyone takes part in the manoeuvre. Then the fishermen return to camp, tired after only a few hours sleep.

As soon as they arrive, the "off-duty" crewmember looks after the catch while the owners assist at the landing. Part of the produce is sold on the spot and is generally made up of cat fish and sharks (in the case of Sakama) or is stored to be sold that same morning in Boffa (in the case of Dobiré). The rest is left where it lies in the sun; then, when decomposition has begun, it is girtted, salted and left to dry. This process gives it a particular taste much appreciated by the Senegalese population.

High tides are the more favourable for the Senegalese fishermen. The water movement is then considerable, the current strong and the fish are unable to escape being trapped in the net.

Generally speaking, the Senegalese consider Guinean waters richer than those of Senegal but more dangerous because of numerous shoals and shallows.

3.6 Commercialization during the campaign

When the migrant fishermen have had a satisfactory campaign and the quantity of processed fish is considerable, as it has been in previous years, transportation to Sénégal is organized amongst them, by camp. A canoe and its crew are chosen to transport the

total amount of processed fish to be sold in Ziguinchor (1 kg is sold between 650 and 950 FCFA). Before setting out, the canoe is subjected to an inspection by Guinean authorities (cost 13.000 FG) and the owners must pay an exportation tax (cost 5.000 FG per 1.000 kg of fish).

The crew and owner of the transport canoe are compensated by the other owners who meanwhile carry on fishing (the expenses are shared among all the owners). This year none of the camps made any in-campaign transport owing to their late arrival in Guinea, the rise in settlement fees and the sums paid out to the Guineans to settle conflicts.

This aspect of the campaign appears interesting to be examine more thoroughly considering that commercialization during the campaign requires a complex organization in order to share the cost of transport, delegate the sale to those who undertake the transportation and compensate them for the time missed on fishing (the fishing unit being absent from the camp at least 8 days).

It will therefore be important to study the criteria of choice of the transport unit, how lost opportunity is calculated and the burden of the compensation shared out among the owners, starting from what quantity of fish is considered necessary for the trip.

4. Human composition and social organization in the camps.

In Sakama, the crews and owners of the nine craft are Serer and Diola, all christian. Among the Diola, three have learnt how to fish with a member of their family; the others, who represent the great majority, do not have more than two years experience in the sector. Some of them do not intend to continue fishing and are making a little money before finding another job.

There are few family ties between the Diola both within a crew and in relation to other crews. In contrast, family ties are strong among a Serer crew in any one craft. All the young men (17 to 35 years of age) are bachelors: only the confirmed fishermen are married, their wives staying behind in Senegal. The majority of Senegalese fishermen in Sakama are native to Ziguinchor. Although the camp is essentially made up of Diola, it is considered Serere, the camp chief's ethnic group.

In Sakama, religious adherence (in this case christian), seems to be the basic factor around which the camp is organized. It dominates the mixed character of ethnic ties and the disparities in the length of presence in fishery. The family ties, although important in Serer fishing units, do not appear to be the preferential criteria in the fishermen's undertaking.

Moreover, within the activity kinship is an element that is diversely spread. From this point of view, the Serer would

appear more homogeneous than the Diola in the same camp, the latter engaging in the activity in a very different way. For the young Diola fishermen in Sakama, the activity can be seen as the opportunity to carry out a profitable short term occupation which allowed them to escape from inactivity and lack of post-school job opportunities.

According to fishermen from Sakama, where the Serer appear to occupy a higher place in the social hierarchy of the camp, they are considered as specialized professional fishermen whereas the Diola, who learnt the profession from them, are considered novices. The Serer only practice subsistence farming during the rainy season whereas the Diola are professional farmers only recently entering the fisheries sector. In Dobiré however, the Diola consider themselves professional fishermen and not as farmers who have changed activity.

The Dobiré camp is entirely made up of Diola. All are moslem and native to the same village, Thionckessyl, in Casamance. The Diola of Dobiré all consider themselves as kinsmen between owners and crews, and as seamen amongst themselves. In addition, they all have family who either practice fishery or who have practiced in the past. In the camp, preference is given to kinship as the main constitutive element in crew composition.

The organization of Dobiré camp is particularly interesting. This is no doubt due to ethnic homogeneity and the fact that all the fishermen come from the same village. As in Sakama, the camp chief has the role of mediator between the Senegalese in the camp and the local authorities, as well as with the population of the host village. He has been a fisherman a long time; he learnt the profession with his brother who had been initiated to fishery by their father. In Dobiré, he is the only one to be accompanied by his wife (who is the only woman in the camp). Money for food is provided jointly and the chief's wife does the cooking for the whole camp.

The charges are divided among the owners, who pay for the food. They must provide a bag of rice every week and give 500 FG a day for condiments and oil. The money is given to a treasurer (an unidentified person), who distributes a certain sum daily to one of the youths who, at the request of the cook, goes for supplies in Boffa. The foodstuffs thus acquired are presented to the treasurer, who accounts for these expenses to the rest of the community and gives the cook what she needs to make the meal.

Every fisherman takes care of his own laundry. Daily, the quantity of fish to be sold in Guinea is jointly placed in one of the canoes for transport to Boffa. The sale takes place and the person in charge of supplies takes the opportunity to go to market. The canoe chosen uses fuel bought with common funds. When the fishermen from the two camps return to Senegal, they

continue fishing until the end of July, and during August and September they farm (rice, palmoil and groundnut).

5. BELIEVES AND CULTURAL ACTIVITIES

The "gris-gris" and other "medecines" meant to protect the canoe and its crew, provide a good catch and fight spellcasters are all made in Senegal. The "karamoko" (marabout) crushes leaves in a calabash, scrutinizes the contents and decides what sacrifice must be made for a successful campaign. According to the fishermen, no ritual takes place in Guinea.

This element seems to reveal the kind of relationship existing between the migrant and native fishermen. The lack of confidence in Guinean karamoko (marabouts) is mainly explained by the effects attributed to these medecines (protection from spells, accidents at sea, loss of nets, etc.) and the personal involvement of those who elaborate them. One does not go to consult just any karamoko, as their actions are specific to the locality in question, notably because of the spirits living there.

If one were to take this analysis a little further, does it mean that the migrant fishermen arrive with their own beliefs as to the milieu to be occupied, the spirits found there, the dangers they could represent? These beliefs would be specific to the migrants who would cast them on the Guinean milieu. The local karamoko would therefore be incapable of protecting the fishermen or fighting something he is not acquainted with.

This hypothesis requires confirmation and it would be interesting to know whether seasonal migrant fishermen adopt the local beliefs as foreign sedentary fishermen do, such as the Sierra Leoneans in Conakry, who know of and fear "Mansabö", an evil spirit from the north of the peninsula. To this one must add the mistrust displayed by the Senegalese with regards to the Guineans who have no real reason to spread the fruit of their occult knowledge to foreigners.

Although in any one society there is a sexual division of labour, formalized through a specialization of tasks within the activity in question, it is generally legitimized in myths of tribal origin and imbued each activity. These assertions are interiorized and passed down through generations by the system of initiation which places the individual in his or her rightful gender and place in society. However, initiation is also the apprenticeship of social rules governing everyday life, stipulating Man's duties, rights, obligations, prohibitions.

It is interesting to note that the Diola of Sakama, who have only recently entered fisheries, have a particular approach to the activity. In most, if not all, fishermen societies, the woman is generally forbidden on board during fishing. The same taboo applies to Guinean fishermen, and the Serer of Sakama and Diola of Dobiré. However, the Diola of Sakama with whom we embarked do not believe that a woman on board taking part in fishing brings bad luck, but they know that the other Serer and Guinean fishermen observe this rule. They therefore apply it more by fear of social sanctions than by mere fear of breaking the rule itself. They believe that fishing is above all a question of chance.

The fact that a woman may take part in fishing reveals to us their state of apprenticeship and the types of strategies which are behind their choice of integrating into this activity.

6. Relationships between migrant fishermen and native populations

6.1 Gifts and taxes.

When the Dobiré camp chief arrived in 1989, his "patron" and the village chief only requested a gift of cola worth 6.000 FG for the right to clear the site and build huts. In 1990, they requested 12.500 FG for the campsite and a 2.000 FG fee per person present.

In addition to these gifts, the Senegalese fishermen must often pay a certain number of taxes to the Guinean administration, which break down as follows:

<u>Merchant navy</u>	FG
- inspection for putting into service	15,000/per canoe
- marine security inspection	30,000/ " "
- exceptional technical inspection	13,000/ " "
- navigation licence	5,000/ " "
- driving licence	5,000/ " "
- professional card	9,000/ " "
- departure inspection	13,000/per canoe/voyage
	90,000 FG
<u>Fishery department</u>	
- fishing licence	1,000/per canoe
- professional card	2,000/ " "
- shark permit	1,000/ " "
- motor tax	25,000/ " "(25 hp)
	40,000/ " "(40 hp)
	69,000 FG
Grand Total	159,000 FG

6.2 Fishing conflicts

During the campaign, conflicts at sea often arise. The fact is that Senegalese fishermen use drift gillnets some 900 metres long, generally in good condition with solid lead-lines.

The fishing, carried out at night, goes through a reconnaissance phase whereby the canoe crosses its fishing-grounds and, at nightfall, the fishermen cast the net which is left to the mercy of the current.

The Guinean fishermen leave much later and place their devices in the dark. These are "légotines" set nets with a 60mm mesh size metres long and bottom-set long-lines.

Sometimes the Senegalese nets drift and hook onto the long-lines or the Guinean set nets. These incidents are settled peacefully with the plaintiff's village port chief and the Senegalese fisherman reimburses the damaged equipment.

However, according to the Senegalese fishermen, other kinds of conflicts arise: such as the Guinean fishermen deliberately cutting Senegalese nets and using them for themselves or using the material to repair their own (we witnessed this kind of appropriation), or they considerably exaggerate the extent of the damage suffered and demand reimbursement of equipment they never actually owned.

Another example of the kind of pressure the Senegalese are subjected to: when fishing has been good, the Dobiré inhabitants come to the camp to beg for fish, which they then take back free of charge.

1990 would appear to be a turning-point for migrant Senegalese fishermen. On one hand fiscal pressure is very strong and on the other, fishing conflicts multiply. Their settlement is rarely favourable to the migrants, to the extent that the Dobiré fishermen do not know whether they will come back to Guinea for the 1991 campaign. Some talk of migrating to Sierra Leone where fish is less abundant but there appears to be less pestering and administrative taxes seem lighter to bear.

Conscious of the problems of coexistence between the Guinean and Senegalese techniques, the Director of Fishery in Boffa has proposed to regulate the kind of devices used. The drift gillnet will have to be fixed for the 1991 campaign, which should greatly reduce the hooking-up of nets and loss of equipment.

When we put this proposition to the Dobiré fishermen, their answer was categorical. From their point of view, a fixed surface net can only measure 70 to 80 metres, otherwise it will not stand up to the strength of the current. They would be obliged to divide their nets, and to quote them "we are already robbed of whole sections of net when we are moored to it, but if we set several nets at different points, even if they are not far apart, we will be unable' to prevent the nets or the catch from being stolen in the dark".

However, Guinean nets are about 800 metres long and are set. We are therefore confronted with an interiorization of totally different fishing techniques. The Senegalese know the techniques and lengths of nets used by the Guineans but cannot conceive making use of this kind of fixed net.

In fact, considering the multiplicity of the conflicts, we may ask ourselves whether they are not the reflection of a more or less lengthy process aiming to chase the Senegalese out of the two campsites. In this respect, the example of Bongdolon is revealing. This village sheltered migrant Senegalese fishermen for many years. This year the latter have not returned, but the drying-racks introduced by the migrants are full and the Guineans working gillnets are making dried salt fish which they sell

regularly in Ziguinchor. This practice appears most profitable!

6.3 Positive aspects of the presence of migrant fishermen

Even if the relationships existing between migrant Senegalese and Guinean fishermen are tainted with conflict, it is nonetheless true that they contribute much to both parties. Guinea is a very favourable fishing-ground for the Senegalese and the techniques they use and the Guineans have learnt and continue to learn much from these good fishermen.

The example of Bongolon tells a lot about the role played by foreign migrant fishermen with regards to training. The Guineans have acquired new capture and fish processing techniques while continuing to use their own type of craft (flimbote and salan).

The two Senegalese captains working in Sakama on Guinean canoes, with a Guinean crew and nets (légotine type) but using Senegalese methods (mobile art) is another example of the role played by migrant fishermen.

Cooperation and transmission of techniques and knowledge, whether directly through apprenticeship as above, or indirectly through imitation and reappropriation, are all worthwhile assets to the development of the fishery. Guinea would lose a great deal if they let Guinean fishermen bring so much financial pressure on the Senegalese that they leave and never come back. The country would lose a non-negligible supply of animal protein brought directly to the Guinean market (we must not forget that part of the production is sold to local dealers, as fish such as catfish, shark and ray -if only to mention the most important- are not suitable for the processing so appreciated by the Senegalese). In addition, the Senegalese fishermen, who have a long maritime tradition behind them and very professional know-how, are prime examples for improving Guinean fishing techniques, a process already underway.

NOTE N°2 INFORMATION ABOUT SIERRA LEONEAN FISHERMEN IN GUINEA

The largest group of foreign migrant fishermen to be found in Guinea is Sierra Leonean.

These fishermen, regardless of their migratory characteristics, are present all along the Guinean coast (see table) where they practice, in their great majority, daytime fishery for small pelagic species with surrounding gillnets of the regae type.

All the Sierra Leonean fishermen surveyed were in Conakry and in particular at Dixin Port III. This landing beach accomodates a large Sierra Leonean community and forms the centre for the organization of this community's fishermen in Guinea.

1. Importance and localization of Sierra Leonean fishermen along the Guinean coast.

The census carried out in 1987 by Gilles Domalain (C.R.N.B.-ORSTOM) only enumerated about 20 Sierra Leonean owners in Conakry. We consider that this number was greatly underestimated owing, on one hand, to the difficulties encountered in investigating migrant fishermen and, on the other hand, the mistrust displayed by the latter with regards to administrative agents periodically sent to collect information. Nevertheless, out of the population investigated, the Sierra Leoneans represented at least 10% of canoe owners and 30% of the total crewmen in Conakry.

During the census carried out by Gilles Domalain and Lionel Malais between 15/12/88 and 7/01/89, out of 685 boat owners, 648 were Guinean and 23 Sierra Leonean; 10 of the latter were salan owners (out of 436), 11 were owners of flimbotes (out of 77) and 2 owners of dugout canoes.

TABLE Localization of Sierra Leonean fishermen on seasonal migration along the Guinean coast.

<u>Landing beach</u>	<u>Prefectures</u>	<u>Observations</u>
Bonfi	Conakry III	all seasons
Boulbinet	Conakry I	
Dixin II	Conakry II	dry season
Dixin III	Conakry II	all season
Landreah	Conakry II	
Kakompass	Boke	
Katchek	Boke	dry season
Taboriah	Koba	October to January
Koukoude	Boffa	
Tuguifilidi	Tugnifily	November - December
Koudeyre	Tugnifily	April-May 1 month
Konimodia	Focariah	
Khunny	Focariah	
Matakang	Focariah	
Rominkine	Benty	dry season
Salatongou	Benty	dry season
Sibkoby	Kalia	every month that has spring tides

2. Different types of migrants

At this point in our studies we are able to distinguish three broad profiles of these fishermen:

- owners settled for many years in Guinea
- crewmen present over several consecutive years without hardly ever returning to Sierra Leone
- owners and fishermen on a fishing campaign

2.1 Owners settled for many years.

The owners residing in Guinea for at least 10 to 20 years are often assimilated in the local population. Among them, some are married to Guinean women (Sousou and Baga). Others have set up their own "compound" and house part of their crews. The family nucleus - wife(s) and children - is present and only travels to Sierra Leone for important family events (deaths, marriages).

We have here a sedentary group who are permanently established abroad. Their crews are recruited among the Sierra Leonean fishermen present over several years. Certain of these owners bring young sailors from Sierra Leone, who in time learn the profession or perfect themselves.

Kinship only plays a small role here and its main purpose is to protect the owner's interests. The owner places a close family member on a craft, not necessarily in a high position, but as a deterrent for pirate landings or embezzlement of fish by the captain.

The crews working for these owners are pluri-ethnic. During the first studies conducted, the sailors declared themselves Temne or Temine. Later and more precise studies altered these first results. About 50% of Sierra Leonean sailors are Temne. The others are Lökö, Meru, Manden, Ancou, Liban (or Libandy), Kono.

2.2 Crewmen present over several years.

Bachelor fishermen form the majority of this group. As for the rare married men, few of them bring their families - wife(s) and children - from Sierra Leone.

Mostly simple fishermen, they came to Guinea on board some craft and remained behind when it left. They form the crews of sedentary owners and periodically change craft, carrying out replacements and signing-up when work is available. The captain and ordinary fishermen know each other from one landing to another. There are few family ties between them, but friendly relationships exist due to their living in neighbouring areas, experiences shared in common within the activity, belonging to the same ethnic group or simply having the same nationality.

Many of them live in the owner's compound or at the latter's "fishmammy", to whom they pay rent in kind (gift of fish). Their whole family is in Sierra Leone and they mean to return there when "the work here is over". This is why they regularly travel to Sierra Leone.

2.3 Fishermen on campaign - seasonal migrants

They are present at a landing beach for one or two months then move on to other fishing-grounds (Koukoude for example). They are very mobile and often move from one settlement to another according to their relationship with the Guineans lodging them or buying their fish.

It is very difficult to conduct a census or learn about their itineraries. From one day to another they can decide to move to another fishing-ground so as to follow the fish (as dictated by the seasons, selling prices, etc.).

At Kaback for example, a fishmammy has a special agreement with a Sierra Leonean fisherman she personally brought over from Sierra Leone and engaged to fish off the island. She lodges the crew in Matakang, lends out money for fuel and sometimes maintenance costs. In exchange, she secures the production for herself. On this same landing beach, owing to the regular presence of migrants, a certain area has been assigned to them on the village outskirts (Téminétay).

There is ethnic unity on the craft among fishermen on seasonal migration and the crewmembers are all closely related (family ties).

3) Techniques used.

The characteristic Sierra Leonean craft is the flimbote or flimbotine. This type of craft is very big (10 to 20 metres long, 2 metres wide and 1,25 m deep), built in planks of framiné with frames made of branches of iroko or linguier. Their double stem gives them an elongated profile, an engine well aft holds the motor of 15 to 40 horsepower. A long oar, attached to the stern, is functions as rudder. The crew of this type of craft is between 13 and 25 men.

This canoe, apart from a few exceptions to the rule, is used to fish small pelagic species with the regae net (which originated in Sierra Leone and was introduced to Guinea in 1984-85). This net differs from the purse seine essentially in that there are no purse lines. But this difference does not infer that this type of nets takes in less than the purse seines.

In fact, owing to the shallow coastal waters, (10% of the surface of the Guinean continental shelf is at a depth of less than 15

metres, and this is the case up to 15 miles from the coast), and the depth of these nets (which is 40 to 42 metres), the lead line is always resting on the seafloor and the closure capacity of the pocket is less crucial than for the deepwater seines. Once the school of fish has been surrounded, the fishermen form the pocket by pulling in the lead line.

This net is made up of several layers of different sized meshes (generally two, maximum three, 50 to 60 mm in size, the smallest mesh being placed on top at along the length of the head rope). The average length of this net is 1.000 metres but some are 1.500 metres long.

Most of the catch does not get gilled in the net, the pocket is pulled in alongside the canoe to be poured on board or emptied with a dip-net.

4. Organization of the work

Specialization is very pronounced; the roles are distributed and exchanged as the fishing progresses. They all correspond to a particular task and can be described as follows:

4.1 Roles and status

Captain	(1)	:	in charge of the boat
Legoman	(1)	:	boat watchman; he is in charge of cleaning and watching it when at the landing beach. He changes the mooring according to the tides, bails out while at sea and guides the vessel with a long gaff when landing. He sleeps on board or next to the boat when in port.
Capini	(1 or 2)	:	steers the boat with a long oar. He stands aft in the canoe.
Opreto	(1)	:	in charge of the engine (use at sea and maintenance on land), the installation and driving. He is held responsible for the engine by the captain.
Pullman	(3 to 6)	:	in teams of three, they are in charge of guiding the net with their arms as it's being emptied.
Lin a cok or cokmen	(6 to 8)	:	pull the head rope when the net is being pulled in.
Lin a led	(4 to 5)	:	pull the lead line when the net is being pulled in.
Robaman	(1)	:	loads and unloads fuel and paddles
Belman	(1)	:	in charge of unloading the fish into basins
Waper	(1)	:	in charge of transporting the fish from the boat to the wharf.

Obviously, the workforce varies according to the length of the canoe and the net. Certain roles are not exchanged nor modified: captain, legoman, opreto and capini maintain their role and only intervene elsewhere if necessary.

Pullman, lin a cok, lin a led, robaman and belman, are all interchangeable roles.

Specific status is conferred on these positions, in decreasing order of importance:

- captain, capini and opreto are highly classed,
- lin a cok or cokmen, lin a led, pullman are equal in intermediary status,
- legoman is an inferior status (also the apprentice's role).

4.2 Fishing

Pelagic fishing with flimbotes is carried out by day, the craft spend the whole day at sea. If the first "casting" is not entirely satisfactory, the captain may order up to two more.

The canoe goes to sea after the legoman has brought it as close as possible to the shore and bailed out the water infiltrated overnight. The motor is set up and the canoe heads for the fishing-ground chosen by the captain. On the way, the fishermen talk and eat the breakfast each of them has brought along. The fishing-grounds are at various distances from the coast. Sometimes $3/4$ of an hour is sufficient to reach the bonga zone and sometimes 2 to 4 hours are necessary for sardinella.

On the fishing-ground, the men take up their posts. The pullmen are situated aft of the net and one ready to reel off the 1.000 metres of head and foot ropes over their outstretched arms. All the other fishermen are standing on the benches. The captain in the bow tries to distinguish the quivering of fish on the surface. We observed two approaches to fish schools of different species:

- the first approach, when the school of bonga has been sighted, is to shut down the motor and make the final approach by paddle. At the captain's signal, the motor is turned on, the first buoy thrown out and the encircling is carried out under motor-power.
- the second approach is entirely motor-powered. The school of sardinella is approached and surrounded as rapidly as possible. The canoe finishes its round-up by coming around to tie onto the first buoy that was set out. The "lin a lede" then begin to work and bring in the head lines, which forms the pocket in which the fish gather. The pullmen become lin a cok. The captain supervises the whole operation and takes part in the first removal of fish from the meshes.

The net is directly put away aft and is ready for a second casting. Upon arrival at the landing, the canoe is beset by hordes of young boys all trying to get one or two fishes "for the sauce".

4.3 Systems of remuneration

The captain watches the fishermen on the return trip as everyone tries to put a few kilos aside. When fishing is good, he shuts an eye on this, but when it is bad, he systematically refuses this sort of "takings".

Remuneration systems are very complex and variable. The model most used in fishing units with Sierra Leonean crews is as follows:

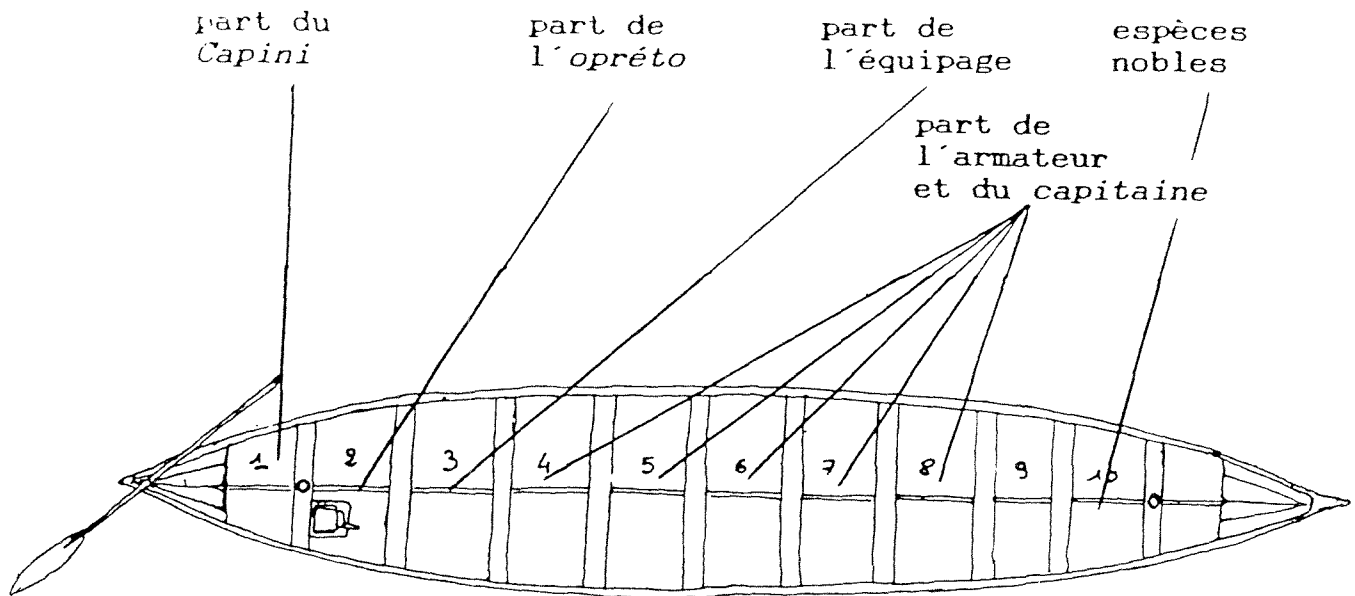
- the captain gives a share to the capini, the opreto and a few fish to the legoman. These shares are specifically arranged on the canoe. Then a space between two frames is given over for the crew's share. The rest is for the owner and is placed up front. The high value species are set aside.

Sometimes the captain's share is included in that of the owner. When the production is sold, he withdraws a certain sum of money from the takings which he considers as due payment.

Many other systems have been identified (payment in cash at the end of the week, a day's fishing a week given over to the crew etc.) but we have not yet analysed the diversity of these systems. A C.R.H.B. team (Centre de Recherches Halieutique de Boussoura) is presently working on this subject. However, we were unable to observe the part share system (a share for the motor, one for the net, one for the boat one for the workers etc..). The different methods of remuneration generally depend on understanding between the owner and the crew and whether fishing has been successful or not. For example, if the takings barely cover the price of fuel, then the crew only earn "cigarette money".

In spite of these differences, it is évident that the capini and the opreto are the better paid besides the captain, the capini being second in line. This payment is individual whereas that of the crew is collective; the fishermen sharing the portion of the catch granted them by the captain.

Situating the fish shares on the cane



5. Social organization in Guinea.

All the Sierra Leoneans in Guinea acknowledge M'Baiye Camara as their chief. He is considered the oldest migrant Sierra Leonean in Guinea, as well as the wisest and the most knowledgeable in "secret things". He is seconded by Moussa Conteh. Both are Temne, elected by the fishermen and are important "initiates". A third person, Fode Nosta, also of Temne origin, is the representative assigned by the Sierra Leonean embassy. Moussa Conteh and Fode Nosta work together to ensure that all goes well. They can mobilize the Sierra Leonean community in the event of death or serious illness by gathering funds and organizing ceremonies. This organization, based in Conakry, and more particularly on Dixin Port III, is called the "Leonean Union" (Union Léonaise). It is competent all along the Guinean coast.

Fode Nosta intervenes when contacts with administrative authorities become indispensable.

The Sierra Leonean owners meet the last friday of every month from 8h to 15h at M'Baiye Camara's compound. During the discussions, the most remarkable happenings of the month are accounted for. If necessary, a general meeting is organized

bringing together all Sierra Leoneans engaged in the activity.

These three persons sometimes form a delegation to visit other Sierra Leonean communities along the coast.

6. Presence in the fishing activity

Generally, the Sierra Leoneans acknowledge the fact that a large part of their know-how was passed on to them from Ghanaian fishermen with whom many of them served as apprentices. All of them have close family members occupied in the activity.

To start with, apprenticeship takes place in ponds and streams. Castnet, arrows, dam nets and poison were their first approach to the activity. Some went straight on to maritime canoe fishery on the flimbote, others simply went on to small-scale coastal fishery in dug-out canoes as a complementary occupation to farming, before being able to embark with larger units.

At the beginning of the French colonization of Guinea, the presence of Sierra Leoneans was observed. At that time they were specialized in building, commerce and fishery. A certain quarter of Conakry is called Teminetay, a name inspired by one of their ethnic groups. Some have been in Guinea for several generations and marriage between Sierra Leoneans and Guineans are frequent.

7. Beliefs and cultural activities

The different Sierra Leonean ethnic groups often share the same taboos, such as being forbidden to take pineapples, unshelled groundnut and bananas on board.

Taboos exist concerning dolphins, turtles and moles which are all forbidden to fish (though this seems recent concerning the turtle, connected with Guinean law and reinforced by the intervention of a wildlife protection association). These beliefs are also respected by some native fishermen and do not correspond to tribal taboos.

The Sierra Leoneans settled in Guinea on a permanent basis make propitiatory sacrifices with the elders of the family that receives them, while all the others procure their "medecines" and make sacrifices in Sierra Leone, either in their native village or with certain ethnic groups renowned for their knowledge in this domain.

However, the belief in spirits ("genies") situated along the coast, is well known to the Sierra Leoneans and shared with the native populations. Regularly, small sacrifices are made individually (gift of cola, white bread, red oil and sometimes a red cock) to protect the fishermen from spells and prevent them coming across maleficent spirits in the areas where they fish.

8. Relationship between Guinean and Sierra Leonean fishermen.

The Sierra Leoneans fishing in Guinea are mainly specialized in small pelagic species using encircling gill-nets. A much smaller number use bottom set or drift gillnets of the légotine type. Some migrants who own small sail salans or small dug-out canoes fish with cast nets (Kaback region).

Many of the techniques were brought in with the Sierra Leoneans. If one considers the example of the salans and flimbotes, these two framed craft are spread all along the Guinean coast, the salan in particular being the basic canoe used by the Guineans. According to studies conducted by B. Lootvoet and M. J. Veiga Coutinho (1990) on canoe building in Conakry, one may note that 14 master carpenters out of 24, 9 associates out of 11 and 49 apprentices out of 100 are Sierra Leoneans. These figures reveal the importance of the role played by the latter in artisanal canoe fishery and the importance of their know-how in those professions connected with the sea.

If the craft have been the object of rapidly transferred technology, this is hardly the same case for the fishing techniques, which necessitate a more complex work organization and a large number of crewmembers. Effectively, the nets implicate an organization of tasks and know-how that demand active participation in apprenticeship and specific knowledge of the species sought after. Traditionally, the Guinean Bago, Sousou, Mandenya and Nalu fishermen carry out small-scale coastal fishery with dug-outs carved from a cotton-tree trunk and fishing on foot with castnets (kassi nete) or conical nets (tête yele). Canoe fishery other than coastal only developed very recently. The former regime did nothing to develop it and it's only over the last fifteen years that this kind of fishery holds the position it deserves. The Guinean fishermen nowadays fish small pelagic species, near the coast, with salans of 6 to 8 metres on average, using encircling gill nets or drift nets which do not require more than 3 men on board the canoe. The chain of movements to operate the gear are very different from one to another.

Therefore, it is not at all surprising that traditions in maritime fishery, knowledge and know-how are in full evolution. In this respect Guinea is overflowing with dynamism. One may observe significant changes over very short periods. It seems quite evident that the Guineans have the will to make up for lost time the canoe fishery sector with help of of larger production units. This situation is illustrated by the bonga and sardinella fishery in Conakry.

Out of 77 flimbotes in activity in Conakry in 1989, 11 belong to Sierra Leoneans, the others are owned in their majority by Guineans who hire a specialized Sierra Leonean workforce. The know-how and professionalism of the Sierra Leoneans is recognized by every body. This poses a problem of organization within the production unit. Generally the captain hired is Sierra Leonean and he is in charge of recruiting the crew, which he chooses mainly among his compatriots. The owner can oblige the captain to hire at least one member of his family.

A typical example of this type of complex organization, observed at Dixin III (Conakry), illustrates the difficulties met in the management of these pluri-national units. The latter differs to those of migrant fishermen which are characterized by a more homogenous ethnic make-up. Only the Guinean-owned canoes experience the organizational difficulties described here-after.

Example of pluri-national organization

A flimbote owner who is not a member of the fishery milieu hired a manager to take care of all the problems pertaining to the fishery unit during his absence. This manager was chosen for his knowledge of the activity and is in charge of all exchanges with the captain he has named. The captain in turn recruited the crew. At this point, it became apparent that this kind of organization was insufficient. The fact was that the manager was Sousou Guinean and the captain Temne Sierra Leonean and a confident and mutually respectful relationship between them did not immediately come into being. The problem was therefore exposed to M'Baiye Camara, the Sierra Leonean representative in Guinea. The latter proposed the engagement of a third person to form the bond between the manager and the captain. This man's status became that of canoe headman, but he did not embark. The captain is now responsible to him for the fishing activities and reports daily. The canoe headman delivers the takings to the manager at the end of the day.

We are thus faced with an organization where social control is fundamental to the success of the production unit. Ethnic and national dichotomy could not be transferred to that of the sea and land. At present, this unit is functioning perfectly and the Guineans (owner and manager) work in confidence with the Sierra Leoneans (canoe headman and captain).

For the owner, this first phase corresponded to a trial investment in the fishery activity. One observes that progressively when the owners find themselves confronted with difficulty of this kind, they place a member of their family on board as apprentice. Through this process of transfer of knowledge and know-how by participation, we now find flimbote type production units with mixed crews or even, in rare cases, where only the captain is Sierra Leonean.

No doubt we will soon be able to observe units where the crews and the captain will all be Guinean, but using Sierra Leonean boats, nets and techniques, reproducing the schema of knowledge transfer that has been accomplished between the Ghanaians and Sierra Leoneans.

In addition to the passing-on of knowledge and technologies described above, Guinea is directly concerned by the activity of these foreign fishermen who unload the totality of their production at Guinean landing beaches. They provide a regular and important supply of fish to the women dealers and processors, who are nearly all Guinean. What's more, the target species caught by these foreign fishermen are essentially small pelagics much appreciated by the latter.

The Sierra Leoneans form the most important foreign community on the Guinean coast. Their presence is of long date and many of them share every day life with the inhabitants of the host quarters and villages they live in. Well-assimilated into the population, sharing certain fishery techniques, having cultural roots in common with the Guineans of the coast south of Conakry, these fishermen are not considered as foreigners who have come to steal the national fish stocks. However, this does not mean that conflicts do not arise, but these are less systematic than those confronting the Senegalese.

Their better structured organization, greater numbers and the fact that many of them work for Guinean nationals, allow them to form an efficient pressure group in the event of false accusations. The main techniques used by the Sierra Leoneans (heavily motorized flimbotes, daytime fishing by spolting the fish) mean that these units do not intrude on those fishing-grounds exploited by the average Guinean unit. The risks of accident, hooking-up of nets, competitive use of the same school of fish are thus greatly limited.

The presence of Sierra Leoneans in Guinea does not raise any specific problem, they contribute significantly to the volume of fish unloaded on the local market and are a factor in the improvement of techniques and evolution of technologies essential to the development of Guinean artisanal fishery.

REMARKS

These two notes inspire us to ask whether a global analysis of the complex migratory phenomenon is possible.

Confronted with the complexity of explicative elements of this phenomenon and the diversity of forms observed, we think it illusory to conduct an analysis attempting to account for fishermen migrations in their entirety.

Beyond the specific characteristics connected to each group of fishermen, it is essential to take into consideration the migratory phenomena as part of a changing force as are the social groups engaging in these migrations. There is convergence of economical, political and ecological factors forming a particular disposition, precisely iterated in time, which we can call an explicative schema.

Thus, there would be an explicative schema for each group of participants. A comparative study of the latter would help us to understand the interaction of traditions, collective or individual strategies and the influence of elements exterior to the group concerned, which characterize these phenomena.

The example of Senegalese and Sierra Leonean fishermen is characteristic of those difficulties encountered in the sociological analysis of migrant fishermen populations. The Serers of Sakama, the Diola of Dobiré and Sakama, the Sierra Leonean owners established in Guinea, crewmen on long migration and crews on seasonal migration along the Guinean coast, are not all implicated in the same manner. The explicative schema of migration as experienced by Sakama camp chief's ancestors cannot now be applied to him. Not that they are entirely foreign to one another but the importance of the shape of intervening elements has changed. The same applies to the different profiles of Sierra Leonean and Senegalese fishermen. This can even be observed within the same village (Sakama).

The interest of sociological and anthropological research on this type of phenomenon is to be able to go beyond the diversity of form, migratory facts and explicative schema by studying them in their dynamics perspective and taking as a model the reasons leading to their coming into existence.

Conakry, June 1990.

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FISHERMEN'S MIGRATIONS IN SIERRA LEONE:
A CASE STUDY FROM TOMBO VILLAGE

By Kurt Wagner

1. INTRODUCTION

As the heading of this paper indicates we can observe a considerable change in the motivation and migration patterns of local fisherfolk in Sierra Leone through recent years. Whereas in "former days" (in Tombo up to the early 80ies) the main reason for migration was migrating fish stocks during the rainy season, it is nowadays mainly based on factors being derived from a process of technological changes and commercialisation, e.g. availability and prices of fishing gear, availability of credit facilities, technical innovations, marketing links etc..

Artisanal fisheries projects played a major role in this regard, contributing to a process of immigration of fishermen which changed formerly "idyllic, sleepy fishing villages" to busy commercialized production and processing centres with a large cash flow and an immense complex of related infrastructural and social problems.

The fishing village Tombo in Sierra Leone is probably the most outstanding example of this development because of the relatively long existence of FPPT (since 10 years) which contributed to a major extent to the briefly outlined change.

2. DEFINITION OF THE TERM "MIGRATION" AND PROBLEM DEFINITION

The term "migration" is in this paper mainly used to describe a process where Sierra Leone fishermen and people having other occupations before, of different origin and tribal affiliation, but also fishermen of other nationalities moved and settled in Tombo to engage in fishing because of a complex set of reasons.

This settlement is of a more or less permanent nature containing seasonal and short term migration patterns which are based on a wide range of motives. The immigration of people being directly or indirectly related to the artisanal fisheries is also of major importance to Tombo, but cannot be dealt with in the context of this limited paper.

The focus of this paper is mainly that aspect of internal immigration of fishermen and other people who's main occupation today is fishing, dealing with the problem from different angles:

- (1) Description of migrant fishermen
- (2) Reasons and motives for migration and their micro economic effects
- (3) Migration patterns
- (4) Socio cultural problems of migration
- (5) Macro economic effects of migration
- (6) Fishermen's migration as possible source of conflict
- (7) Technological impact of migrant fishermen

The departure perspective of the migrants will be neglected because the author lacks the necessary data and background information.

3. METHODOLOGY

In general, statistical data for the above mentioned topic is virtually non-existent on a national level, probably because no importance was given to the fact and consequences of the phenomenon of migrating fishermen in the past (there is a "Frame Survey" carried out by the Fisheries Division and Institute of Marine Biology with assistance from all existing Fisheries Development Projects dealing with the problem as a side issue).

The information for his paper was gathered through unstructured interviews, questionnaires, participant observation and the use of FPPT and other secondary data. Some of the data and information has to be treated with care and scepticism because the areas and aspects involved were sensitive to the informants and therefore not easy to obtain by the methods used.

Also because Tombo is not a virgin ground for research and researchers one has to take into consideration, that at least some of the informants formulated their answers and statements in a way which possibly anticipated the interest of the person putting the question forward.

My prior sample base are 41 Ghana Boats and 14 Yelefufu Boats operating in Tombo. The later description and analysis will concentrate on the 41 Ghana Boats because they were/are of overall importance for the socio-economic development of the village. Furthermore I will use some data from the West North West Fisheries and Community Development Programme, sponsored by EEC, and from the above mentioned Frame Survey.

My findings and conclusions will be delimited to Tombo because the available data and information does not allow detailed verification concerning the development in other fishing villages or on the national level in Sierra Leone. Nevertheless certain generalizations seem possible, especially in cases where artisanal fisheries projects with similar project approaches and activities do exist.

4. HISTORICAL OVERVIEW OF FISHERIES DEVELOPMENT IN TOMBO

Tombo is a coastal artisanal fisheries village¹ in Sierra Leone.

It is situated near the southern most extension of the Freetown Peninsula on the north shore of the Yawri Bay with an approximate resident population of 8,500 inhabitants (SCHÖNECKER 1989).

The presently existing village Tombo and its history is not imaginable without the phenomenon of people migrating into the area to settle and organize their livelihood. According to historical records and oral histories, Tombo was founded and settled around the turn of the 18th Century by **SHERBRO** immigrants who tried to escape from an interethnic war know as the "black man war".

¹ The term village is misleading in this context. If one takes 8,500 inhabitants, the existing social set up, the extend of economic activities, the cash flow, the existing infrastructure etc. into consideration, it seems to be more appropriate to talk of a middle-sized town.

The Sherbros were engaged in both, subsistence farming and fishing using the dug-out canoe, hook and line and cast net as their mode of production. The village was established at a site now referred to as Sherbro Town between 1812 and 1840.

A second immigration occurred around 1840 by **KREOLES** (liberated Africans) from Kent, which obviously tried to escape direct British Colonial Administration in the northern part of the Freetown Peninsula. Beside these facts they were looking for a surrounding where the food supply was more secure.

During this time Tombo was already a likely landing and trading site and the village received vessels from Shenge, Plantain Island and the area around Banana Island and Cape Shilling. There was an active illicit trade with slaves, timber and palmoil going on in the upper Yawri Bay area, but there are no sources to verify to what extent Tombo was involved (HENDRIX 1982 : 13).

Major social changes took place in Tombo after World War I (the 1920ies) as a consequence of its excellent fishing grounds, its favourable beach and the rising living standard on the Peninsula as a whole. A further immigration of several indigenous ethnic groups from the Protectorate started, the most important one being the **TEMNES**. According to oral information the first Temnes came by sea in their bigger dug-out canoes via the Fogbo River which enters Yawri Bay near Ribbi Village. These Temnes were migrating with their families in small fishing bands and were in the beginning not accepted as new settlers in Tombo. Only after the first Temne managed to marry a Sherbro woman were they allowed to stay and settle (YAMBA LEMGE, oral information 1990). These Temnes had an important influence on the social set up of Tombo by bringing their own language, customs and the Islamic religion with them.

Another major impact for the socio-economic development of Tombo was the introduction of the "hut-tax" by the British Colonial Administration in the 1890ies for the Colony and the Protectorate, which forced the inhabitants to increase production and marketing of fisheries products to create the necessary revenues. This resulted in a developing trade of fishery products to Kent, Waterloo and Freetown and stimulated marketing women to be more mobile. This market orientation reinforced the traditional sexual division of labour within the fishing sector: harvesting of fish was done by men whereas the preservation (cooking and smoking) and marketing was the domain of women.

During the developmental stage and the efficiency of the Tombo fisheries remained rather low in the 19th and the beginning of the 20th Centuries because of the following reasons:

- inadequate production and processing techniques and technologies;
- poor infrastructure, particularly roads, which would have been necessary to integrate the fishing communities into the already existing larger market economy;
- lack of government support and subsidies to the artisanal fisheries under the colonial administration.

Through the construction of the Peninsula Road, just before the outbreak of World War II, accessibility to Tombo was improved considerably. Prior to that people from Tombo reached Freetown by boat via Kent or walked to Waterloo to catch the train. This intensified connection to the "outside world" increased trade links to Waterloo and Freetown and women spent more marketing days buying and selling.

An important change in the processing field was achieved through the introduction of wire mesh in parts of the Colony and the Protectorate in the late 1920ies which resulted in an improvement of the "**BANDA**" (local smoking platform) by giving it a more durable surface.

No considerable developments and changes took place from the 1930ies until the early 1950ies in the Tombo fisheries. The production met the subsistence needs of the people and the surplus produced enabled the residents to obtain enough cash to pay taxes and to purchase everyday commodities, tools and equipment to maintain the production level of fishing. The village was even facing an economic decline which was expressed by a decreasing number of people residing in Tombo:

1911 - 462 inhabitants - 79 houses

1931 - 368 inhabitants - 75 houses (CENSUS 1911,1931).

One possible explanation for this fact could be the migration pattern of Tombo fishermen which had developed until the turn of the century. Some fishermen specialized for example in Bonga fishing and migrated therefore to Shenge and Plantain Island during the rainy season together with the fish stocks.

Technology, mode of production and the extent of production remained more or less the same possibly because of a limited purchasing power and non-existent alternatives. External factors like sector policy and government support were also on-going and not favourable to the small scale fisheries.

The most important socio-economic and technological change took place in Tombo after the arrival of the **MFANTSE** fishermen from **Ghana** in the mid 1950ies. They are credited with the introduction of nearly all the innovations that promoted the Tombo fisheries to its present semi industrial stage.

The period between 1955 and 1965 has been described as economic "take off" in Tombo fisheries. The increased production resulted in the creation of long distance markets close to the Liberian and Guinean borders. From that time fishmongers and heavy trucks appeared from Freetown to buy the surplus production and transport it to the markets up country.

These extending economic activities resulted in a new ethnic immigration, the most important one being the **FULLAHS** from **Guinea**. At the beginning they were engaged as casual labourers, later concentrating on wood cutting and wood supply. This process created a new occupational subgroup in the fishing dominated economy of Tombo.

The Mfantse were expelled by the Sierra Leone government between 1965-1967 which nevertheless did not leave behind a production vacuum because the new type of technology and production had already been adopted by the Temnes and partly by the Sherbros.

During the 1970ies no considerable developments in the technological field took place, while the production capacity of fishing further expanded through immigrating fishermen. Out of our sample 18 owners of Ghana Boats and 5 owners of Yelefufu Boats migrated to Tombo between 1971 and 1980.

Immense changes have taken place again since the implementation of the **Fisheries Pilot Project** in 1980, being presently in its fourth phase continuing until August 1993.

5. MIGRANT FISHERMEN: THEIR MOTIVES, MIGRATION PATTERNS AND THE EFFECTS OF MIGRATION ON THE SOCIO-ECONOMIC ENVIRONMENT

5.1 DESCRIPTION OF MIGRANT FISHERMEN

According to the data obtained from the before-mentioned Frame Survey carried out in 1989/90 and internal project data there are presently 50 Ghana Boats (46 outboard, 4 inboard propelled) and 55 Yelefufu Boats ² stationed and operating in Tombo.

From the total sample of 41 Ghana Boats, 39 boats belong to people who are (on the basis of my definition) "migrants", whereas only 2 boats belong to indigenous Sherbro fishermen. Out of the migrant boatowners 40% migrated to Tombo between 1960-1969; 27,5 % between 1970-1979 and 32,5% since 1980 and now covering the present life span of the project .

Most of the migrants (80%) originate from other fishing/coastal areas like Kambia District, Port Loko District and the Western Area. Only a minority come from the hinterlands or are of foreign origin - 2 boatowners are of Ghanaen nationality (see map in the annex).

The ethnic composition is rather heterogeneous consisting of 7 different tribes with a majority of Temnes representing 70% of all boat owners. As already mentioned two boat owners belong to the Ghanaen tribe of the Mfantse and one is a Lebanese with a Sierra Leone passport residing in Freetown.

The data on the occupational background of the present Ghana boat owners shows, that most of them were also fishermen in their former place of residence 54%, followed by businessmen 27%, farmers 7%, carpenters (boatbuilders) 7% and others 5%.

² The term Yelefufu Boats includes the following boat types:
Kru Canoes, Standard 1-3 and Standard 3-5.

Concerning the type of vessel and the fishing gear presently owned the sample shows the following characteristics:

All the boats are Ghana planked boats of a length between 15-20 metres and a width of 1.5-1.8 metres. 4 boats are propelled by 35 Hp diesel inboard engines (Yamaha), whereas the other 37 boats use petrol engines ,25 or 40 Hp, (Yamaha, Tohatsu) as the mode of propulsion.

There is a considerable change observed concerning the type of vessel owned by our boat owners in their former place of residence. Only 28% (6) of them already had Ghana planked boats while 72% (15) had "only" Yelefufu boats (standard 1-3 and 3-5).

The only type of fishing gear presently used by all Ghana boats is the ring net with specifications either for Herring or Bonga fishing or a combination of both. The change observed for the type of boats is also valid for the fishing gear used in the past. Only 30% (7) boat owners were using ring net, while 70% (16) used other types of fishing gear (set net, draft net, long line, beach seine, fish trap/fence etc.).

Also the sharing systems between boat owner and crew are very similar for all boats being part of the sample. 80% (34) of the boats have a sharing system where the crew has one free fishing day per week and a daily "whap" being a well defined part of the daily catch, distributed according to hierarchical position and function within the boat. Only 10% (4) of the crews have 2 free fishing days/week but therefore no daily whap and 5% (2) crews have 2 free fishing days/week divided in two shares (50% for the crew and 50% for the boat owner) with a daily whap.

One boat owner pays his crew solely in cash using the argument, that he does not want to be cheated by crew members any longer while practising the daily whap system which is difficult to control.

In general there is an observed tendency for boat owners to avoid the daily whap system more and more replacing it by cash payments. The background for this change is the limited means of control and the fact, that crew members normally sell their share of the catch immediately after landing, very often to low prices, in order to have cash at hand for the evening entertainment. This has a negative effect on the setting of the price for the overall catch which is "done daily" on the basis of offer and demand.

Another interesting factor in the context of controlling the boat is the number and position of direct relatives of the boat owners among the crew members.

Out of a total of 1034 crew members 24% (249) are direct relatives, mainly employed in the most important functions of the boat (captain, engine operator, "legoman" -the man who anchors and observes the boat during the night-, "rubberman" -the man who deals with the fuel-) to secure, at least to a minimum extent the interest of the boat owner.

The access to credit materializes for most of the migrant fishermen in Tombo within the context of family/relative or friendship ties, 68%; whereas 29% rely on the project and only 3% use bank facilities to satisfy their capital needs.

USUSU saving groups also played a major role in the past but are facing more and more problems because of high inflation rates and rather long rotation periods until every group member has received his own share ³.

³ There is a tendency to observe that USUSU groups react to this negative trend by changing their saving targets from a specific amount of cash to a specific article, for example an

5.2 REASONS AND MOTIVES FOR MIGRATION AND THEIR MICRO ECONOMIC EFFECTS

The reasons given for the migration to Tombo in general consist of a set of motivations, which are difficult to separate from each other and to set in hierarchical order according to

the frequency of quotations by the informants. Our questionnaire offered a maximum of 3 quotations leading to the following picture of main motives:

32%	abundance of fishing grounds
24%	possibility to accumulate capital
19%	higher prices for product
15%	existing family/relative relationships
8%	access to fishing equipment
<u>2%</u>	<u>improved boatbuilding practices</u>
100%	Total

A very interesting aspect is to observe the correlation of reasons given and their hierarchical order within the period of migration to Tombo by the specific informant. The result in short: The earlier that fishermen came to Tombo (1960ies and 1970ies) the more reasons like abundance of fishing grounds and existing family/relative ties were mentioned. The group of fishermen which came to Tombo in the 1980ies (since the existence of the project) mentioned with a higher priority reasons like access to fishing equipment, higher prices of product and possibility to accumulate capital.

Beside the fact, that fisheries projects are obviously seen as a guarantor for resonable and reliable fishing gear and engine supply these arguments show clearly that the artisanal fisheries has undergone a complex process of commercialisation and monetarization within the mentioned period.

One possible answer that was given in the questionnaire but not choosen a single time, was "fewer family obligations". This does not necessarily mean, that this fact did not play any role in the motives of informants but shows clearly, that an open answer to such a sensitive question is nearly impossible in a close social environment.

In unstructured discussions this argument was mentioned quite often but in more indirect formulations or explanations of situations, where the dependence of "the family" was expressed and seen as a burden.

outboard engine. To gurantee, that every member of the group gets the same outboard engine, the financial contributions by each member have to be increased according to the inflational trend during the life span of the group.

Related to a short term migration from Tombo to other places the following reasons were mentioned:

- access to fishing gear (other projects or countries are cheaper);
- migrating stocks (primarily during the rainy season);
- availability of fuel and other "crisis products";
- better daily prices.

For access to fishing gear and fuel only Guinea was mentioned, beside other fisheries projects, only Guinea mentioned, whereas for migrating stocks and higher prices a range of regions within Sierra Leone was given (Gooderich, Plantain Island, Shenge, Yelibuya, Mboki, Tissana, Katta etc.).

It is important to note, that this migration takes place on a daily or weekly basis and is therefore not comparable to the old forms of seasonal migration which also existed in Tombo until the early 80ies and will be described in the next chapter.

5.3 MIGRATION PATTERNS

Beside the fact that the present Tombo is not imaginable without the heavy immigration of fishermen during the 60ies, 70ies and 80ies, there is also the phenomenon of outmigration based on different background reasons.

The specific form of seasonal migration developed roughly around the turn of the century through the specialization of fishermen in Bonga fishing. During the rainy season the Bonga stocks migrate away from shore lines obviously because too much fresh water's penetrating into the sea. Following them to the open sea fishermen migrated to Shenge and Plantain Island; these settlements being closer to the rainy season fishing grounds.

The number of Ghana boats specialized in Herring fishing and Yelefufu boats (standard 3-5) remained more or less stable during this period.

Some figures from the early 80ies illustrate this phenomenon of seasonal migration in Tombo.

Population change:

Total population during dry season	7026 (1981)
Total population during rainy season	5342 (1981)
Difference	----- 1674 = 24%

Sex ratio of migrants:

Out of 1674 people leaving Tombo 65% (1088) were men, 25% (418) woman and 10% (168) children.

Change of boats:

Type/No of boats	dry season	rainy season	reduction	%
Ghana boat (Herring)	35	31	4	11
Bonga boat	61	30	31	51
Standard 3-5 (manpower)	75	56	19	25
Total	171	117	54	32

(KOTNIK, 1981)

As main reasons for this migration were given:

- (1) Bonga boats/crews followed the Bonga which migrated to other areas north and south of the Yawri Bay.
- (2) Fishing activities were generally declining because of unfavourable weather conditions which led to a dismissal of crew members by boat owners (according to Kotnik 33% of the crews were dismissed).

While I doubt the validity of the total population figures given (according to my observation overestimated), the decreasing number of people residing in Tombo during the rainy season is a clear indicator of a seasonal migration pattern during this period. The total reduction of boats stationed and operated in Tombo by 32 % and specifically Bonga boats by 1% also shows the heavy influence of natural factors like weather conditions and migrating stocks on the fishing activities which forced fishermen to react. According to oral information parts of Tombo were virtually empty through the rains because a high number of occupants had left their houses for a time span of 3-4 months. The phenomenon of seasonal migration also materialized in the semipermanent character of the houses occupied by these migrant families, being mainly constructed of a primitive mud wall superstructure and a grass thatched roof.

Oral sources state, that this form of seasonal migration no longer exists to that extent in Tombo, a statement that coincides with my observation during the last four years. The Frame Survey records 10 migrant fishermen for Tombo in 1989/90 but does not specify the type of migration and the background reasons for the movements making it very difficult to work with these figures. I would speculate, that this migration is mainly based on a search for better prices or easier and cheaper access to fishing equipment having a daily or weekly character.

Another indicator that the old form of seasonal migration no longer takes place is the standard of the houses being built by migrants nowadays. They are of a more durable construction and in most of the cases roofed with CI sheets. That they still do not meet the standard of the houses built by migrants living in Tombo for 20-30 years or by the indigenous has other reasons which will be elaborated later.

The reasons why this form of seasonal migration diminished more or less during the last 10 years are manifold but centre mainly around technological changes. Fishermen no longer specialize in Bonga or Herring fishing but do a combination of both according to the respective season. They constructed nets suitable for catching both species and replaced the traditional smaller Bonga boats equipped

with a special Bonga net and a crew of 6-8 men with the larger Herring boat equipped with a huge Herring/Bonga ring net (approx. 800x400 m) operated by a crew of 15-20 men.

These boats are more seaworthy and the changes in propulsion techniques - more powerful outboard and diesel inboard engines - increased the operational/catching radius of the boats. They can therefore cover fishing grounds far away and at the same time return to their operational base every day. A transfer of the operational base is no longer necessary. Beside these facts, Tombo offers today a wide spectrum of functioning infrastructural facilities like health services, water supply, schooling, a favourable landing site and fairly easy road accessibility and last not least a secure and resonable supply with fishing gear, engines and lubricants through FPPT making it an attractive fishing site compared to other places.

5.4 SOCIO-CULTURAL ASPECTS OF MIGRATION

Questioned about their social position and role in their home and "host" society the fishermen's answers resulted in the following picture (more than one quotation was possible):

- 29% were heads of household in their home society
- 27% belonged to a ruling/influential household
- 44% were associated with prominent social organisations (secret societies, social clubs, self-help groups, saving groups)

Referring to their social position and status in Tombo the informants stated on the basis of their self perception:

- 14% define themselves as belonging to the "local leadership class" based on economic wealth and personal influence
- 17% define their position as "big boat owner" -being a migrant owing 2 or more boats
- 69% state that they are associated with a prominent social organisation

One possible quotation not explicitly mentioned for their Tombo situation was being a head of the household because every boat owner regards himself as "naturally" being in that position.

Looking at the structure of the answers more closely it is interesting to note, that a rather high percentage of boat owners associate themselves with prominent social organisations both in their home and even more in their "host" society.

This aspect can be interpreted as an attempt at integration and a possible try at working themselves up in the strata of ruling positions within their new social environment.

There is a significant difference in their self perception related to belonging to the local leadership class. Whereas 27% state this for their home villages/towns only 17% think that they also belong in Tombo to the ruling figures. This coincides with my personal observations that no important public or other official position within Tombo is held by a migrant fishermen, not even by one of those who have been residing in Tombo for more than 15-20 years. All posts or positions regarded

as influential and important are occupied by the so called "born of the soil" either through top down nominations or elections which have a very paternalistic character.

During informal discussions quite a number of migrant fishermen mentioned that they do not see themselves as "Tombonians" but as strangers coming from X or Z even after a rather long period of staying in Tombo. The reasons for this self perception are again manifold but I see two factors being of major importance:

- (1) The so called born of the soil do not encourage integration because they see these strangers as a danger to their traditional social set up with its specific mechanisms to control power and to distribute post and functions according to the hierarchical position of households in the social fabric of the village over generations.
- (2) The migrants themselves in spite of attempts at integration are, mentally and physically very much bound to their home towns/villages, which is expressed by the fact, that many of them invest more in houses and infrastructure over there than in Tombo bearing in mind that they intend to spend their old age and die at home.

Questioned about this aspect, all informants stated that they invest in their home towns/villages in one way or the other. 49% invest in infrastructure -houses and compounds-, 28% in business, 18 % are establishing farms and 5% mentioned other areas.

Some of the migrant fishermen try to overcome the social "dilemma" of being a stranger by forming their own social organisations which might also have material backgrounds. Football clubs are very prominent in this context so also are USUSU saving groups. A fairly new organisation is a club calling itself the "top twenty" comprising people who regard themselves as the most prominent strangers in Tombo.

5.5 MACRO ECONOMIC EFFECTS OF MIGRATING FISHERMEN

Taking into consideration that the number of boats operating in Tombo increased by 32,5% (13) during the last ten year⁴ the conclusion that the catch also must have increased is obvious. The overall catch increased from:

1984	-	1,729	tons (May - Dec.)
1985	-	4,252	" (Jan. - Dec.)
1986	-	4,891	" (Jan. - Dec.)
1987	-	7,255	" (Jan. - Dec.) ⁵ (FPPT Statistics)

⁴ The actual figure should be higher because the sample covers only 41 boats out of a total of 50 boats.

⁵ Later data are not available because it has not been processed.

If one takes an overall production of 7,000 tons per year and 50 operating boats into consideration, each boat catches 140tons/year presently, resulting in 1,400 tons higher production with 10 more boats/year. These figures are not very reliable but there is no doubt about increased catches over the years which can also be deduced from other indicators such as increased number and capacity of Bandas, increased fuel wood consumption for fish processing, more marketing trips up country etc..

A positive effect of the increased number of boats and the extended production is more employment in the areas of fishing, processing, marketing and in occupations related to these activities, like wood cutting and splitting, basket making, construction works etc..

The overall importance of fishing for Tombo can be seen from the figure that approximately 50% of all heads of households are engaged in fishing or directly related activities (SCHÖNECKER, 1989). The higher production leads to an immense cash flow which again has a positive effect on consumption and investment behaviour. Tombo is today likely one of the richest villages in Sierra Leone, but this material wealth does not produce only positive side effects as can be seen later.

The positive material effects produced by immigration in Tombo have vice versa negative consequences in the places of origin of the migrants. Productive potentials were withdrawn which led to declining fishing, processing and marketing activities resulting in decreasing employment possibilities, lower productivity and cash flow.

Social coherence is also very often impaired through this outmigration and one gets the impression of dying villages/towns when going through them because there are only the old and handicapped left not in the position of giving any important incentive to socio-economic development.

5.6 FISHERMEN'S MIGRATION AS POSSIBLE SOURCE OF CONFLICT

It seems to be obvious that the relationship between migrant fishermen and the indigenous population is not always free of tension.

Within their self perception the migrants characterize their relationship with indigenous "Tombonians" as follows (more than one quotation possible):

- 41% friendly
- 27% competitive
- 14% jealous
- 13% non acceptance
- 5% promotive

These areas of conflict were identified:

- 41% customs and belief
- 33% land ownership problems
- 11% family affairs
- 7% money affairs
- 4% illegal taxation
- 4% method of fishing

The assessment of the relationship with the Tombonians is in more than 50% of the cases expressed by adjectives with a negative connotation like competitive, non acceptance and jealousy, whereas only 5% (promotive) express a feeling of being actively integrated into the indigenous population.

The adjective "friendly" is not specific enough for clear deductions because it entails both the possibility of giving a person enough space for his own personal and material development and also a way where friendliness can be absolutely formalized and non integrative.

Elaborating upon the areas of conflict might be helpful to clarify the picture of given feelings centring around the antipodes of integration and non acceptance. Two areas are of major importance as sources of conflicts according to the information received:

- (1) customs and belief
- (2) landownership

Customs and belief as it is mentioned in this context is not clear to me because the forms and structures of social organisations and their inbound values, beliefs and rituals are very similar for their home society as well as for Tombo. Point might be, that the importance and presence of the secret societies in Tombo is very limited, whereas most of the migrants stem from areas where these societies still play a very active role in the every day life of people.

Another conclusion could be that this formulation was used to describe in a tactful manner the fact, that no migrant, or better stranger, managed up to now to become an active member of the local leadership class. Further, it is difficult to verify because conflicts based on such a background are normally not publicized and therefore difficult for outsiders to observe.

Conflicts around landownership are in comparison much more openly expressed and handled. Until a few years ago the indigenous were hesitant to sell any land to migrants for their semipermanent or permanent settlement in Tombo. Land was only leased on a rather short term basis -often not more than five years- which resulted in building construction of a very low standard, often collapsing after a heavy rainy season.

During the four years of my stay I observed a considerable change of behaviour concerning the willingness to sell land to strangers. More and more "born of the soil" sell land nowadays, being attracted by high prices, having no inheritors willing to live in Tombo or being influenced by other reasons. This tendency is manifested in a number of newly erected or improved houses with a higher standard (concrete walls, CI-sheets etc.) leading to the conclusion, that these people regard themselves as permanent settlers for the future.

One other aspect mentioned as source of conflict was method of fishing (4%). These conflicts obviously played a more important role in the past as already outlined in the chapter "historical overview of fisheries development in Tombo", especially the Mfantse from Ghana were fought by Sherbros and Temnes because they feared their higher productivity possibly through new technologies and skills brought by these strangers.

Nowadays these conflicts arise from time to time when too small mesh sizes or net are used which catch too many of juvenile fish. Normally these conflicts can be solved locally in that the respective fisherman is forced by the cooperative and local key persons to change his netting equipment. In cases where this conflict solving strategy does not work, the boat is not allowed to land its catch in Tombo anymore.

5.7 TECHNOLOGICAL IMPACT OF MIGRANT FISHERMEN

The largest impact on the fisheries development in Tombo was without any doubt the arrival of Mfantse fishermen from Ghana in the 50ies and early 60ies.

Among other aspects, they are credited for the introduction of a new type of large vessel equipped with a huge ring net which was suitable for Bonga and Herring fishing. This coincided with new ideas about crew size and division of labour (they operated their larger dug-out canoes with 6 to 10 men) and later led to the innovation of planked canoes with 25 Hp outboard units and a crew size of 10-14 men.

This increase of crew size made it nearly impossible to recruit a crew solely of matrikin or patrikin relations resulting in the introduction of paid labour in fisheries. These technological changes (bigger boats, nets and engine propulsion) also required a higher initial investment and higher costs for operation and maintenance.

In their innovative capacity the Mfantse were not restricted to fishing but also introduced the still operating improved "**Fante Banda**", which is constructed of mud brick walls topped with iron poles and wire mesh. This led to a more durable construction and an increased size of the platforms, both being preconditions for an expansion of production.

Because of the superiority of the Mfantse in terms of technology and labour organisation, Tombo fishermen were forced to adopt the new technologies and learn the respective skills if they were to compete in the local situation. This process was more or less finalized in the early 60ies, mainly by Temnes. Only a few indigenous Sherbros changed to the new mode of production.

According to oral information, the Sherbros were content with their catch as long as subsistence was covered and provision made for their drinking habits. As a result of this self-sufficiency orientation the Sherbros did not adopt the type of fishing introduced by the Ghanaians, probably because they feared the high financial risk and general uncertainty of highly commercialized fishing.

As learned from oral information, the Mfantse were not accepted readily by Sherbros and Temnes because of the fear that their method of fishing would

deprive cast net and line fishermen by depleting their habitual fishing grounds. Fights at sea and at the beach were reported.

The leading role of the Mfantse as "agents of charge" cannot be overestimated because the present semi industrial stage of Tombo fisheries is not conceivable without their constructive role in the introduction and dissemination of new technologies and skills.

Without that being their intention, they were able to diffuse their technology and skills because after a short while of rejection local people started to adopt the new techniques realizing that this would be their only chance to compete with the strangers. But not all ethnic groups were attracted by these changes even when their form of fishing guarantees only a minimum of what a successful Ghana boat owner can earn through Bonga and Herring fishing.

6. INSTEAD OF A SUMMARY

The importance of migrating fishermen to the fisheries and overall development of Tombo cannot be overestimated in the context of what I tried to describe, analyze and interpret. That Tombo is not at all imaginable without migrants is only standing as a metaphor in this context.

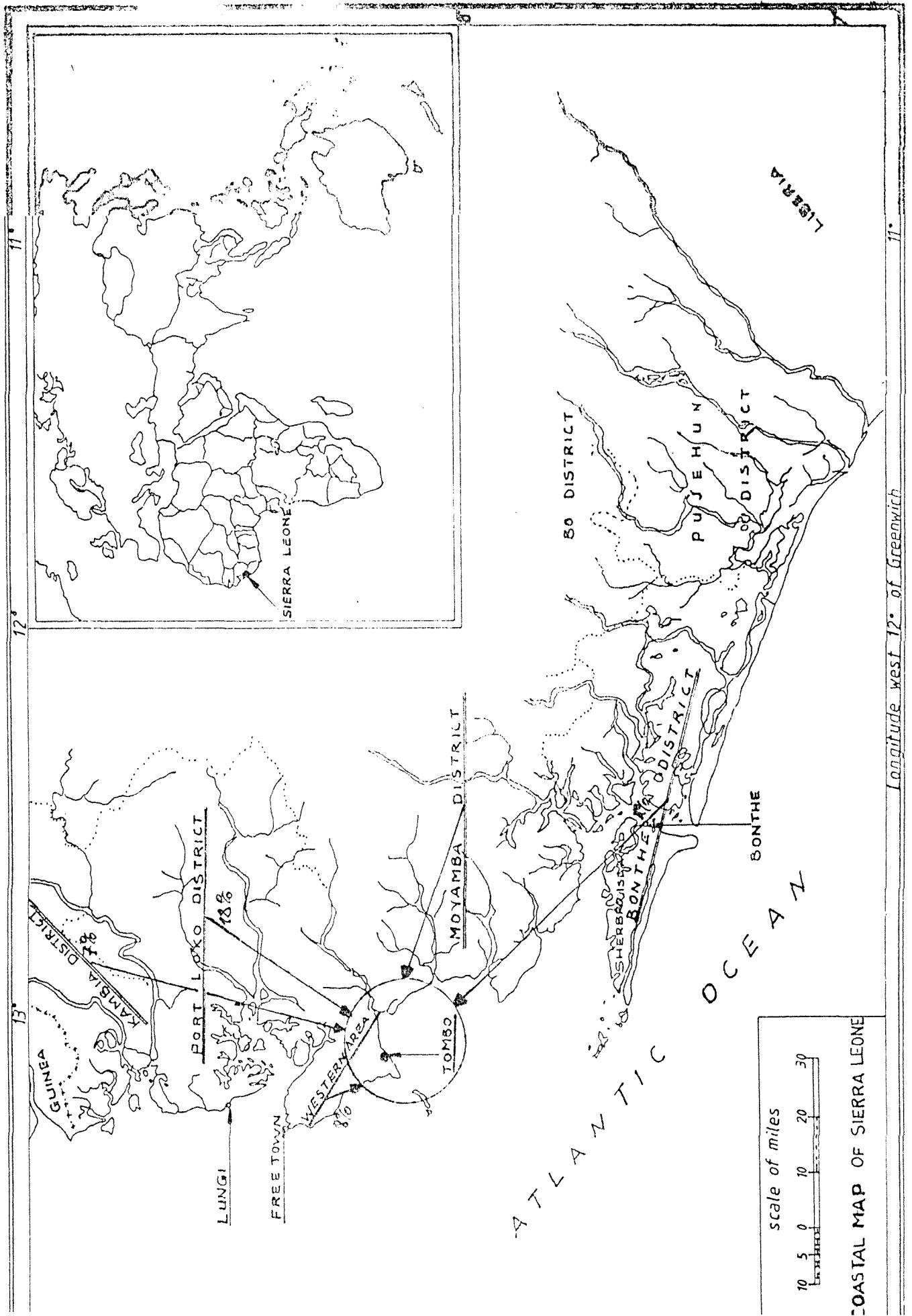
It is not necessary to summarize the stages, aspects and developments mentioned before and I will therefore briefly raise a problem that I am facing in my everyday working reality in Tombo. The problem is: how to attract the interest and integrate so-called migrants into the community development programme of a development project like FPPT.

Even if I take into consideration that part of the problem is home made-through the behaviour of the indigenous population, mainly characterized by non-acceptance, the problem remains, because the number of migrants who are not willing to integrate themselves through their own efforts is also not small. These people state directly or indirectly, that they are only interested in using the facilities and amenities of Tombo, but that they are not ready to contribute anything as long as they are not forced to do so.

The basic behaviour pattern is "to get rich quick" which implies, that they do not "invest" in the public sector in Tombo, either materially or mentally. Because they constitute a high percentage of the overall population and because local government is non-existent, they are a burden to the Tombo infrastructure while only taking and using. Their willingness to give and contribute is rather limited as long as they are not forced to pay fees, taxes or to contribute in terms of labour.

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**ARTISANAL FISHERIES AND FISHERMEN'S
MIGRATIONS IN LIBERIA**

by

Jan M. Haakonsen

1. Introduction : Overview of Liberian fisheries

Liberia has one of the longer coastlines in West Africa, 590 km, slightly longer than that of Ghana or Senegal. However, fish resources are much poorer due to a combination of conditions unfavourable to large scale fish reproduction : narrow continental shelf, no major upwellings and a lack of long-term temperature gradients (Smart & Sheves 1979). Yet, if the available resources were fully exploited they would go a long way towards meeting the modest population's fish requirements.

One problem in this connection is the poor knowledge we have on Liberian maritime resources which is basically based on the quick surveys by research vessels. Estimates about potential yields vary greatly but normally fall within the ranges 9,000-15,000 tons for demersal species, 19,400 - 41,000 tons for coastal pelagic species and 1,200 - 1,600 tons for shrimp (Ssentongo 1987).

Poor catch statistics over the years do not help clarify the situation to any major degree (1). They do indicate, however, that artisanal fisheries has played a very prominent role in the country's fish supply, at least until this year when all maritime fishing activities have come to a halt as a consequence of the civil war which, at the moment of writing, is still raging in the country.

At one point, Liberia possessed a fairly large industrial fishing fleet which particularly went to the rich shrimp resources in the northern end of the national waters and also to some extent in Sierra Leonean territory (Smart & Sheves, 1979). The industrial era in Liberian fisheries started in 1955 and witnessed the growth of one particularly large company, Mensurado, which was supplied by up to 30 vessels by the late 1970s (Eppler 1986). This company effectively went bankrupt after it was taken over by government just after the 1980 coup which brought the late Samuel K. Doe to power, and although other companies continued to exist, in name at least, and new ones emerged (2), total landings by Liberian vessels have been consistently lower than artisanal ones throughout the 1980's according to official figures as shown in table 1 below.

Table 1 : Total landings by sector in Liberia
1980-88 (in tons)

	1980	1981	1982	1983	1984	1985	1986	1987	1988
Ind. fisheries - shrimp	n.a.	280	601	844	502	622	181	222	213
Ind. fisheries - other	n.a.	2,416	3,643	4,592	4,169	1,087	7,158	6,543	4,957
Ind. fisheries total	5,473	2,696	4,244	5,436	4,671	1,710	7,339	6,765	5,175
Art. fisheries total	8,318	6,578	5,909	6,280	6,766	6,367	7,108	7,966	6,870

Sources: Flowers 1986, for years 1980-85; Bureau of Fisheries 1989, (partly processed data sheets) for 1986-88

A few additional remarks should be made here :

a) first of all, the quality of the statistics is such that they must be treated very cautiously,

b) industrial shrimp catches have dropped dramatically, officially at least, from the 1970's (from 1973 on they were at least 1,300 tons a year) to the 1980's

c) a recent and well-founded estimate (Ratcliffe & Lindley 1988) puts artisanal catches at about twice the official figures in recent years, i.e. about 15,000 tons, while industrial catches are calculated to be only around 3,700 tons.

2. The development of artisanal fisheries and early migrations

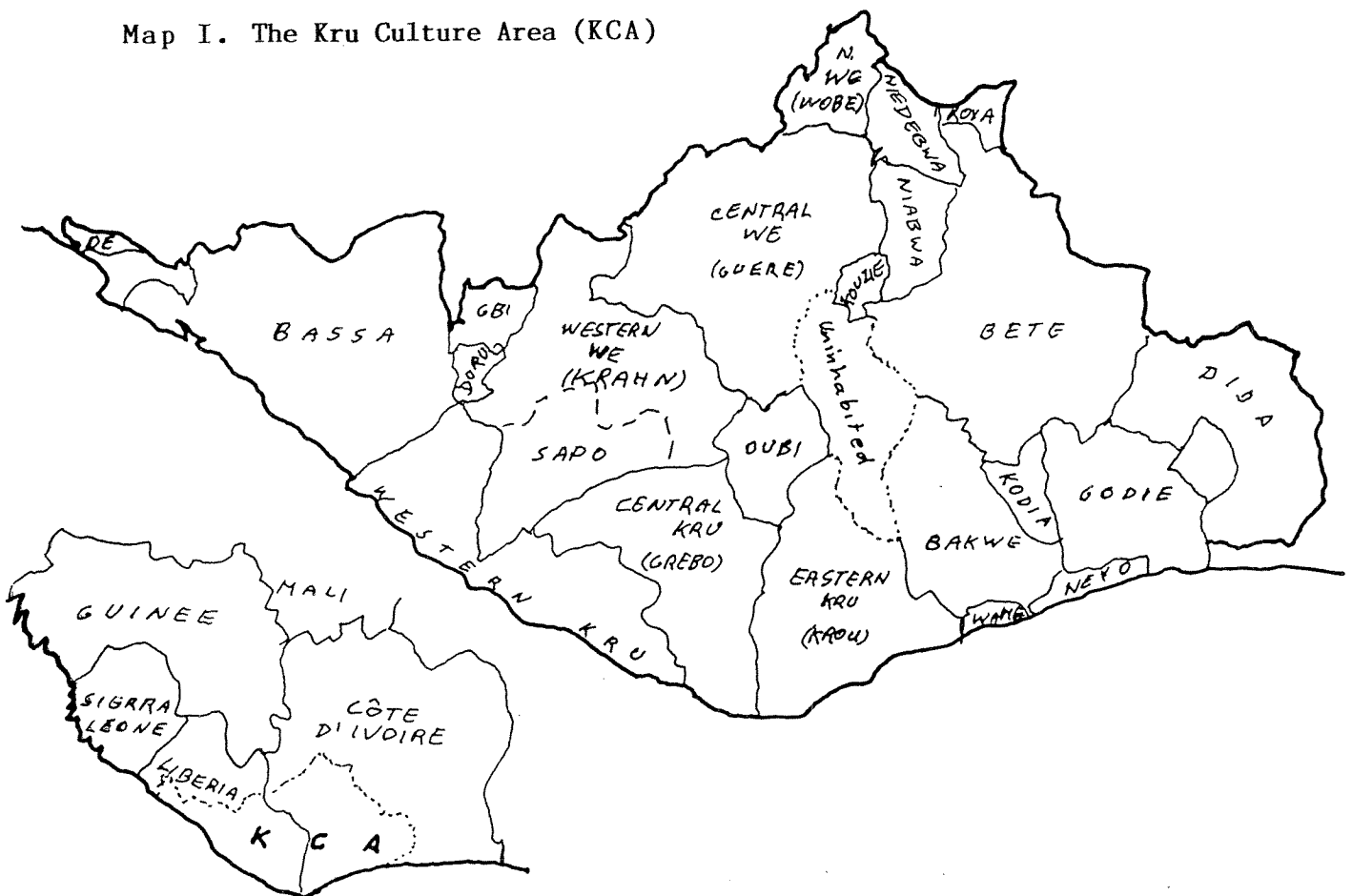
The first known reports of fishing and fishermen in Liberia or rather, what was originally labeled the Grain or Pepper Coast by the first European explorers, are those by Duarte Pacheco Pereira (see e.g. de Surgy 1969 ; Chauveau, 1986). In his famous voyage along West Africa's coast 1506-1508 he mentions "the negroes" living beyond "rio Cestos" (Cess river or Rivercess) and those in "Grand Sesters" (Grand Cess), whom he refers to as

"great fishermen who go fishing two to three leagues (2) at sea in some canoes resembling a weaver's shuttle" (de Surgy 1969 : 1)

There is little doubt that these were the people who became widely known as the Kru or Kroumen and who are still based on the same coastal stretch. Some sources claim more recent origin for the Kru, for instance Hayden, who refers to five sources in support of the claim that the Kru only "reached the coast perhaps 200 years ago after a series of intermittent stops during a journey from some area west of the Sudan" (1971 : 2). Most historical and anthropological evidence suggests otherwise, however.

There is nevertheless considerable confusion around the term Kru or Krou, as it often refers to a whole cultural area or assemblage of related ethnic groups, 6 in Liberia and 12 - 15 in Côte d'Ivoire (Schwartz 1974 ; Massing 1980). The sea-faring Kru are thus usually referred to as Nanakrou in Côte d'Ivoire, while in Liberia and Sierra Leone they are simply called Kru, while the other sub-groups are called by different names (e.g. Grebo, Krahn, Bassa, etc., see map).

Map I. The Kru Culture Area (KCA)



The first Europeans in West Africa were very impressed by these people adventuring themselves at high seas in miniscule canoes, and Portuguese, Dutch, French and English engaged them as both seamen and longshoremen to transport people and goods across the dreaded surf. The following quote by a 19th century sea-captain exemplifies the high regard of the Europeans for the Kru :

"I must not forget the Kroo-boys - fine good-natured fellows, instinctively watermen, almost amphibious. Their native home is the country of Sinou in the central part of the Republic of Liberia. They are to be found all along the coast ; in fact I don't know what the coast would do without them. They are invaluable, and represent the most generally useful -whether ashore or afloat- and important tribe on the West Coast of Africa. Without them it would be difficult to work, on this malarial coast, our men-of-war, mail steamers, foreign vessels, all loading and unloading being done by them". (Moloney 1883 : 20)

Their association with ships and often actual employment as ship's crew, have lead many people to believe that the very name Kru (or Krou) comes from the English word "crew". However, the terminology dates back to before the English expansion in West Africa Schwartz, first tracing the employment of the name to the Portuguese version Krao in the late 16th century calls its resemblance to the word "crew" simply a "phonetical coincidence (1974 : 1).

It is perhaps curious that a group of people with such an obvious familiarity with the sea, regardless of its dangers and almost unrivaled in terms of seamanship, should never evolve into an equally skillful assemblage of fishermen. Fishing has always appeared to be an important activity among the Kru, especially certain clans referred to as the kle-po, literally fish-men (Massing 1980 : 240), and indeed many travel accounts from the Liberian coast of the 19th century in particular, refer specifically to these "Fishmen". However, even today their fishing methods and craft are basically unchanged from when Perreira first encountered their "shuttle-like" canoes nearly half a millenium ago.

This has not prevented Kru fishermen from migrating out of their relatively narrow coastal strip in what are now Sinoe and Grand Kru counties. First of all, they spread along the Liberian coast and established distinct fishing communities in the coastal towns as they grew up, and today we find specially named Kru-towns in Monrovia, Robertsport, Buchanan (Zetterstrom 1969) and Harper. They also dominate the coastal strip from Sasstown well into Maryland country.

Migration across present national borders also took place at an early stage, probably because of the great demand for Kru as longshoremen. In Freetown, there was an established Kru community by the beginning of the 18th century, at one point counting 2,000 individuals, and although they may have been employed in other tasks, de Surgy is probably right in suggesting that there must have been some "Nanakrou" (i.e. fishermen) among them (1969 : 133). The migration of Kru fishermen into their western Côte d'Ivoire settlements probably took place at the end of the last century with the establishment of official trading posts in Tabou, Bérébi, San Pedro and Sassandra, though the establishment of more or less permanent fishing communities came much later. De Surgy (ibid.) suggests 1940 for Tabou and 1952 for Sassandra.

More important for Liberia's fish production however was the arrival of Ghanaian migrants, in this case Fanti and Anlo-Ewe, to the country.

According to the Fante community in Harper, Fante fishermen first started coming there in the 1920's. Gruvel (quoted in de Surgy 1965 & 1969) reported the presence of Fante fishermen in nearby Tabou and the Ivoirian side of the border in 1912, so the report from Harper appears realistic, a continuation of the gradual westward and, from Harper (Cape Palmas) on northwestward movement of the Fanti in the early part of this century. Von Gnielinski (1972), however, says the Fante came to Liberia only in the 1930's, but it is not clear where this information originates.

In the 1940's, there appears to have been almost no Fante fishermen in Liberia, possibly because of the war, and when they returned, they were looked upon with suspicion as they were suspected of kidnapping local children for ritual purposes. It is interesting that a similar accusation, as de Surgy (1969) mentions, used to be made against the Ewe in Côte d'Ivoire, though probably unfounded. Possibly the Fante were being used as scapegoats to cover human sacrifice committed by secret societies of particularly the Americo-Liberians, as happened in 1986. (4). In any case, a FAO masterfisherman could in 1952 report 110 "Accra" (Ghana) canoes of an average of 8 m along the Liberian coast, half of them in Monrovia (van Pel 1954). He also estimated the yearly catches of Fante and "Popoh" fishermen at 2,640 tons. Two years later, one of his colleagues reported that "many" Fanti were operating out of Rivercess and "some" in since (Greenville). He made no mention of Monrovia though (Fredriksen 1957).

Less is known about the origins of the Anlo-Ewe migrations, but it is likely they are of more recent date, probably after World War II. It is interesting that they are referred to as Popoh in Liberia, though it is established beyond doubt that they are Anlo-Ewe, though some have lived in both Togo and Benin and may even have been born there.

3. Structure and distribution of artisanal fishermen in Liberia today (5)

a) National fishermen : the Kru

Most official estimates give a total of 700-900 canoes, the latest government census in 1985 gives the figure of 859 (Thornes 1986) operating from some 35 landing beaches in 7 regions. However, in an extensive EEC sponsored survey of the Liberian coast in 1988, Ratcliffe & Lindley arrived at a figure of "not less than 1,000" (1988 : 22). The corresponding estimated catches of the Kru were less impressive, an average of 1 ton per year or a total of about 1,000 tons.

The reason is that most Kru fishermen continue to operate pretty much in the same way as they always have, from small 1 - 2 man canoes (mostly one) and using almost exclusively simple handlines. The standard Kru canoe is 3 - 6 m, about 40 - 50 cm wide and with an extremely low freeboard. They are equipped with rudimentary sprit sails mostly made out of old sacks which are raised whenever there is a bit of wind, which is usually away from shore in the morning and towards shore in the afternoon. This also influences the fishing pattern : Kru fishermen usually go out to sea in the early morning and come back in the early afternoon.

The sails notwithstanding, the hand-paddle remains the principal means of propulsion of the Kru canoe and it can be hard work for the fishermen to reach out to the rocky bottoms favoured by the Kru. As a result, it is rare for a fisherman to go fishing more than every second day or three days a week, the physical strain is such as to prevent daily excursions.

The gear used is mostly limited to handlines with baited hooks of various sizes : a sea-bream line for rocky bottoms is usually composed of three N° 6 - 8 ringed bent hooks, a grouper line for more muddy bottoms of two N° 2 - 4 ringed bent hooks and a sandy bottom line of seven N° 9 - 10 ringed back hooks for small breams and mackerels. For surface and midwater, a line with one N° 2 - 4 ringed bent hook is used (Anum Doyi & Wood 1988 : 46). Fishermen usually carry a selection of hooks and lines with them. In addition, trolling lines, sometimes with artificial lures, are used on the way to and from the fishing ground.

Nets are rarely used, the Kru complaining that they are unable to repair them. In Harper, a large number of nets was apparently introduced to the Kru in the 1940's (Wentholt 1987), but the effort lasted only as long as the nets. Another factor restricting the use of nets is the canoe size : from the smallest ones it is virtually impossible to set and pull even the smallest gill net. The situation is different for the larger 2 - 4 man Kru canoes which are sometimes built and can be upto 8 meters long, with a wider beam and a higher freeboard, showing some Ghana-canoe influences. A few, less than 20 in the whole country, are provided with wells for the mounting of engines of 10-25 hp, and these canoes are being used by Kru fishermen for more advanced methods such as gill-netting. Yet Ratcliffe and Lindley could during their survey only identify "less than a dozen Kru fishermen who had made significant progress" (1988 : 21), exceptions they saw as "motivated individuals who have broken free of the Kru community's social attitudes" (ibid : 23), a somewhat bombastic and Eurocentric statement, perhaps.

Nevertheless Ratcliffe and Lindley are touching upon a factor which cannot be neglected, namely the socio-cultural organization of Kru society which may be a real impediment towards a more technologically developed fishery than that pursued today. All too often (e.g. Jorion 1986, Eppler 1986 and even Ratcliffe and Lindley 1988), Kru fishermen are dismissed as unskilled, part-time fishermen. This can be challenged. Regarding their poor fishing ability, an experienced Ghanaian fishing technologist brought up in a typical Adan line-fishing community comments :

"The Kru fishermen are generally described as crude and unskilled, but from my observations in Harper, I am convinced that these line fishermen are highly skilled in their profession" (Anum Doyi & Wood 1988 : 48).

As for their alleged part-time fishing, it is true that some (but by no means all) Kru fishermen in the towns, Monrovia in particular, adhere to their shipping traditions and now work mostly as dockworkers and stevedores, fishing only in their spare-time or when there is no work in the port. However, in rural areas they do little other economic activity than fishing. Even in their home territories where they own agricultural land, little time is spent on the farm. In the Kru traditional farm system, based largely on the slash and burn technique, the men are only responsible for clearing the land, which may take only a few weeks a year. All other activities like planting, weeding and harvesting are women's work. Thus the men are largely free to pursue fishing which they may not do as often as other fishermen in part because of the physical strain and the need for rest days.

Another factor is the relatively poor returns from line fishing outside the main population centres. Although the Kru catch mostly high quality fish, it seldom commands very high prices outside Monrovia or Buchanan. Quick market surveys conducted in Harper in 1986 and 1987 (Haakonsen & Sheves 1986, Wentholt 1987) indicated that prices of species like snapper and grouper were only 25 - 50 % higher than those of for instance caranx or barracuda and within the range of Liberian \$ 1 - 1.50 per kg (6).

Catches are also mostly moderate. During a visit to Grand Cess in November 1986 the landings of all 24 canoes that had left for sea were observed. Except for two canoes which had caught a large shark each, and one with a sailfish of about 20 kg, most catches were well under 10 kg, and a few between 10 and 15 kg. It is doubtful that the total value of the fish landed from the 24 canoes that day exceeded Liberian \$ 200, Grand Cess market prices being lower than Harper (Haakonsen & Sheves 1986).

Somewhat better were the results from the three landings of 18 Kru canoes followed in Greenville, also in November 1986. Catches here, which were quite mixed, totaled 591 kg for an average of 10.9 kg per canoe per landing. By comparison, the catches of six Fante fishermen using 2" to 3.5" gillnets from six locally built larger "Kru-type" canoes, were an average of 18.1 kg, almost exclusively butternose (*Polydactylus*) and/or cassava fish (*Pseudotolithus*).

We have to remember, however, that capital and operating costs for the Kru are very low. A small canoe costs \$ 50 to \$ 150 and lasts several years, sail and paddles are similarly not very costly, the same goes for lines, weights and hooks. The only real operational cost they potentially face is bait which preferably is sardinella bought from the Fante, but can also be caught by the Kru themselves with castnets.

b) National fishermen : the Grebo

The Grebo are closely related to the Kru (Massing 1980, suggest they should be called the Eastern Kru), but do not have the same maritime tradition. Nevertheless they pursue some fishing, though close to shore, often with good results. Ratcliffe and Lindley reported castnet fishermen in Harper (most probably Grebo but not 100 % confirmed) catching up to a bucket of small mullets in one throw and which they rightly pointed out was "more than many Kru fishermen catch in one day" (1988 : 21 in appendix 3).

The Grebo are otherwise known for two specialities within fishing. One is diving for gigantic oysters of up to 15 cm which they get loose from their rock-beds with hammer and chisel. The second, regrettably, is to use dynamite, one of the very few instances where this method is used for marine fishing in West Africa. Besides being very damaging to fish breeding areas and wasteful, as only a small part of the stunned fish is recovered, fishing with dynamite is obviously dangerous, something a few blind and hand-less ex-fishermen in Harper can attest to. As a whole however the Grebo's contribution to national fish production is insignificant.

c) Immigrant fishermen : the Fante

Good descriptions of Fante fishermen have been presented in many other publications (e.g. de Surgy 1965 & 1969, Vercruijsse 1984, Christensen 1978 ; etc) and will undoubtedly be dealt with in detail in other papers in this forum. Therefore only their main characteristics as relevant to Liberia in particular will be dealt with here.

We have seen that the Fante have been active in Liberia for a long time, with a possible break during World War II and occasional "withdrawals" in the 1960's and 1980's due to conflicts with the administrative authorities. Today, most Fante fishermen come from Komenda, British Komenda in particular (as opposed to Dutch Komenda a few km away). This conforms well with de Surgy's (1969 : 241) observations from Côte d'Ivoire on the basis of which he concludes that Fante fishermen abroad tend to group together according to place or village of origin.

Today's Fante's appear firmly established and almost absorbed into Liberian society (though with continued Fante socio-cultural characteristics). Probably because of the long distance to Ghana, company contracts appear to be longer than in other countries the Fante migrate to, namely 3 - 7 years. It is usually only a "big man", i.e. the canoe owner, who can afford to go home on visits during a contract period, ordinary crew numbers have to wait until it ends. Many of them may then go on for a second, third or fourth company contract in Liberia. Yet, the apparent integration does not make the fishermen fullfledged Liberian citizens, even those having lived there for 20 years or more retain their Ghanaian citizenship. Most also live under rather poor housing condition, not quite daring to invest in a proper house and good furniture for fear of losing it all of a sudden one day. Such investments are usually made in their home village in Ghana.

Figures for the development of the number of Fante canoes, here included a handful of Popoh canoes, have lead some people to conclude that artisanal fisheries has been stagnant or even declining, in the 1980s in particular (e.g. Ssentongo 1987, Eppler 1986). However, the problem may again be poorly kept statistics. The official figures and most quoted estimates are as follows in the table II :

Particular attention should be given to the 1988 figure taken from the Ratcliffe & Lindley survey and which is no doubt the most accurate frame survey in recent years. It also gives the highest number in nearly four decades indicating anything but a decline in Fante fisheries in Liberia. Moreover, it should be remembered that while the canoes counted by van Pel in 1954 were an average of 8 metres, the ones accounted for in 1988 were between 9 and 17 m and equipped with 25, 40 and 50 hp outboard engines.

Table II : Ghana canoes in Liberia

1950	-	1960	44	1970	86	1980	167
51	-	61	42	71	65	81	182
52	-	62	80	72	50	82	206
53	-	63	52	73	48	83	192
54	110	64	65	74	54	84	188
55	-	65	91	75	88	85	147
56	-	66	26	76	83	86	246+
57	-	67	53	77	87	87	-
58	-	68	43	78	179	88	262
59	-	69	63	79	252		

Sources : van Pel 1954 ; Eppler 1986 ; Flowers 1986 ;
Ssetongo 1987 ; Haakonsen & Sheves 1986 ;
Ratcliffe & Lindley 1988. (7)

Not knowing the exact distribution of these canoes by type or size, no accurate estimate can be made of the number of Fante fishermen in Liberia. But an educated guess, based on an average of 12 crew members per canoe (apprentices included) would give us a total of about 3,000. In addition come the families, most of them also Fante. Just as at home, the wives and other Fante women are the smokers, traders and in some cases also credit suppliers. A few Fante fishermen have married local, usually Kru, women but this has little overall impact to the traditional pattern.

Most Fante canoes operate from naturally sheltered bases, of which the Liberian coastline offers a few, a factor contributing to lengthen the canoe's life(8). This can be very important, as new canoes can only be obtained in Ghana and brought by sea route. Although *Triplochyton sclerexiton*, the raw material for the Ghana canoe, grows in Liberia in some quantity, there is no canoe building tradition of this type.

The fishermen use basically the same gear as they use in Ghana, among the more important being the watsa (purse seine) and ali (sardinella drift net/surrounding net) and which are used to catch the principal artisanal fish resources such as sardinella (*aurita* and *maderensis*) and bonga (*Ethmalosa fimbriata*). Support gear for the off-season and principal gear for smaller canoes include tenga set net (50 - 65 mm mesh size, 2 m deep), tengaf set net (100 mm mesh size, 2 m deep) epabua/kafani (caranx)/shark net (180 - 270 mm mesh size, 9 - 10 m deep) and cedi drift net (100 mm mesh size, 10 m deep) (Anum Doyi 1987 : 5). It should also be recalled that some Fante set netters have taken to use locally built canoes, which may account for the relatively many larger and higher free board "Kru canoes" observed by Ratcliffe & Lindley.

Marketing and market outlets appears to be no problem for the Fante fishermen, smoked fish being appreciated all over Liberia and some also ending up accross the border in Guinea. The fishermen's women follow the same procedure as in Ghana and smoke the fish, especially small pelagics. Only when they cannot handle the whole catch do they sell some fish to Kru-women for smoking. Kru-women otherwise do some retail trading of fish, particularly fresh fish in coastal towns while most smoked fish destined for inland markets appears taken up by traders from the Mandingo and other ethnic groups (Akerele 1979).

The main constraint faced by Fante fishermen in Liberia, in recent years anyhow, appears to be the local lack of engines, spare parts and nets of all kind, besides of course the problem of replacing a canoe.

d) Immigrant fishermen : The "Popoh"

As explained earlier, the "Popoh" are actually Anlo-Ewe beach-seine fishermen. They are all concentrated in two locations, Popoh Beach in Monrovia and Robertsport. The beach seine companies are probably 7 or 8, some using very old Ghanaian dug-outs, some locally built, large "Kru canoes". Company sizes are said to be as small as 8 individuals (Jorion 1986 : 9), and the beach seine observed are also small and in worse shape than normal. Some Kru people are hired on a daily bases to haul in the seines.

The "Popoh" seem to have been settled a long time in Liberia, the chief fisherman in Robertsport, for instance, had arrived in 1960 after having lived in Togo and Benin, though born on the Anlo peninsula. The "Popoh" also complain about the lack of netting material, but seem to be in a state of general decline in contrast to the Fante community. Their contribution to the country's fish production is also extremely modest.

e) Immigrant fishermen : others

There is yet another category of foreign artisanal fishermen, though to call them "immigrant" is misleading as they stay in Liberian waters for only a few days at a time and never touch land. These are Lebou and Ga line fishermen based in San Pedro (Côte d'Ivoire), some 120 km from the border. Equipped with up to 600 litres of fuel and ice for a week, they venture into Southern Liberian waters where the many rocky grounds offer high quality fish which fetches extremely good prices in Côte d'Ivoire. That this activity is illegal, goes without saying, but it is incotrollable and probably much less damaging to Liberian fish resources than, say, the dumping of unwanted by-catch from the many shrimp trawlers.

It is interesting to note that there have been reported attempts by foreign line fishermen to establish themselves in Harper, but this caused indignation and generated vigorous local opposition : hook and line has been and will always remain a Kru activity in Liberia, this is one area where foreign fishermen are definitely not accepted.

4. Government policies and impact of migrant fishermen in Liberia

Fisheries policies in Liberia are generally inadequate or nonexistent, and in any case poorly enforced, except perhaps on a local level. The government has generally been very tolerant towards immigrant fishermen like the Fante, but this seems due more to "laissez-faire" than to an actually established policy.

The regulation affecting the artisanal fishermen most directly is the yearly canoe licence fee reported to be \$ 40 or 50 for large (Fante) canoes and \$ 10 or 15 for small (Kru) canoes. There is no doubt that fishermen, especially migrant fishermen, do pay these fees to local fisheries officers, though it does not always appear in the records of the Bureau of Fisheries in Monrovia.

More obscure is the applicability of the rule that each foreign fishing company is only allowed to operate with a 51 % Liberian partnership, apparently aimed at industrial companies. However, in Sinoe county this is (or was in 1986 at least) being applied to Fante companies, too, who solve the problem by employing the services of a local "partner" who puts himself down on paper as the responsible Liberian for an initial fee and a certain percentage of daily catches. Similar "local enforcement" of other regulations, real or imagined, seems not unusual, to the chagrin of the fishermen.

There appears to be no general legislation regarding artisanal vs. industrial fishing zones, and even if there were, it would probably have been unenforceable, too. This gives at times rise to conflicts between the two sectors, usually because artisanal gear is being destroyed by industrial vessels and their trawls. These conflicts, however, are generally restricted to the northern part of the country where the best trawling grounds are. Further south, rocky bottoms severely restrict the tawlers' range of operation.

When it comes to the impact of migrant artisanal fishermen to Liberian fisheries, this must be looked at on two levels ; one dealing with the technical impact (educational, technology transfer, etc.), the other with the fishing sector and the economy as a whole.

On the first level, the impact must be said to be modest at best. In terms of fishing technology, nearly three quarters of a century's intimate contact and cohabitation (the Fante usually live in or near the "Kru towns") the Fante seem to have been unable to teach their Kru "counterparts" even the simplest technical innovations, such as for instance repairing nets. Not

that they have tried, most Fante would scoff at the mere suggestion of hiring a Kru crew member on their canoes, but on the other hand, a Kru would never accept to lower himself to be ruled by a bosun and adhere to a company contract. Yet, there appears to be little animosity between the two groups, each does its own fishing and not only is there no conflict between the two, they even complement each other.

The impact of migrant fishermen on fish production in Liberia, on the other hand, is dramatic and, in this observer's view, overall very positive. First of all, they provide the local population with a local fish supply, most of the artisanal catch being consumed locally. The contribution to total fish production may in fact be much higher than suggested in table 1. Ratcliffe & Lindley suggest the artisanal landings to be at least twice as much as reported in official statistics and suggest the country's actual fish supply may be as follows :

Table 3 : Estimated composition of Liberian Fish Supply

<u>Supplier</u>	<u>Tons/year</u>
Fante fishermen	14,000
Kru fishermen	1,000
Local trawlers	1,200
Foreign trawlers (by-catch)	2,500
Imports (frozen)	13,200
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Total	31,900

(Source : Ratcliffe & Lindley 1988 : 30)

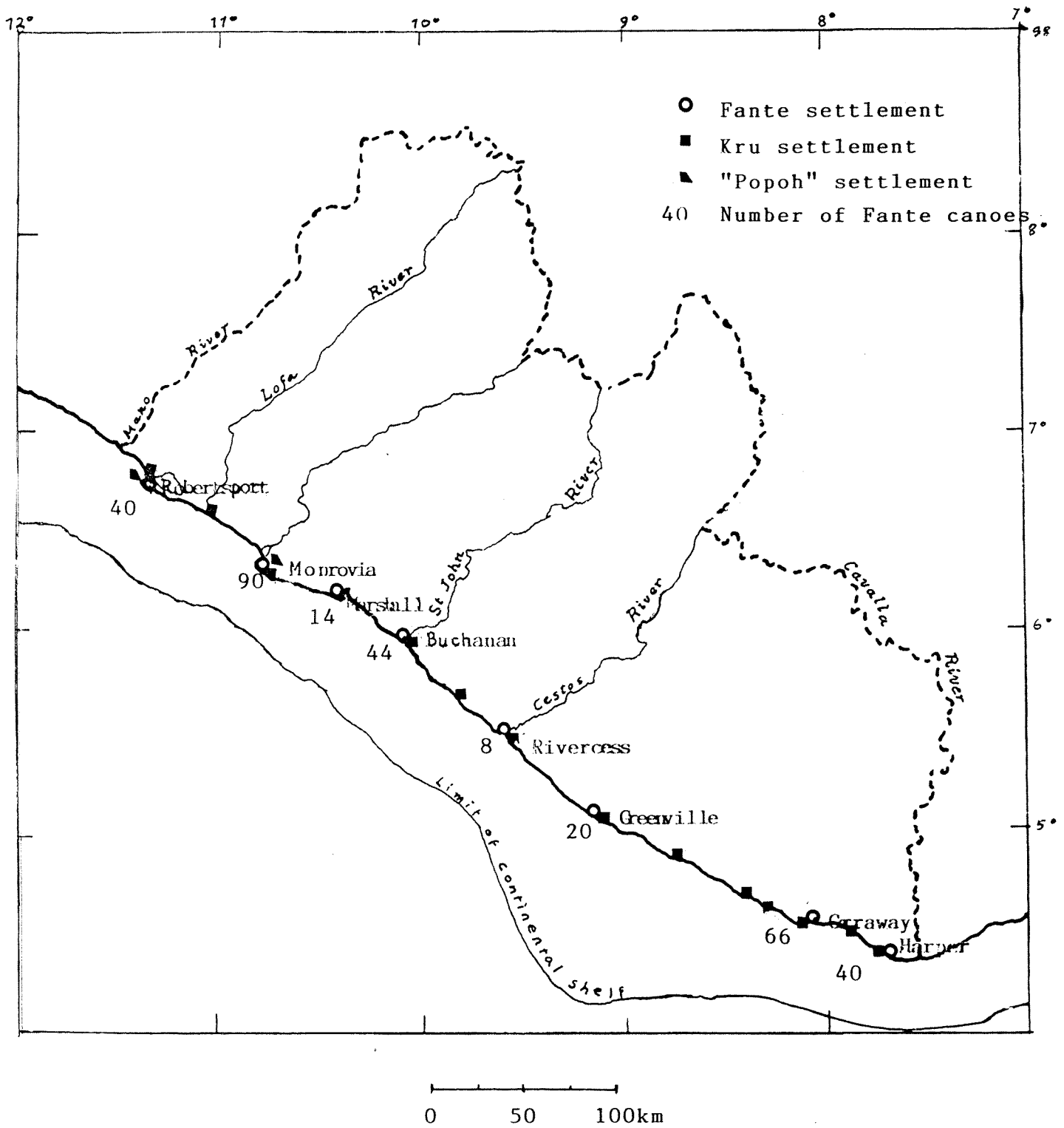
This means that the Fante are responsible for 93 % of artisanal catches, 76 % of total domestic catch and 44 % of total marine fish supply in the country !

The same authors also calculate certain direct economic benefits of the immigrant fishermen to the Liberian economy : for one thing, the Fante bring in considerable investments, " a conservative estimate" of the replacement value of the Fante owned fleet and gear (most brought in from abroad) being US \$ 8 million ; secondly, fish caught by the Fante (and which would surely not have been caught by the Kru or the local trawler fleet) represents an import substitution value of "at least" US \$ 10 million (1988 : 2). These are significant figures in a poor country of only 2 million people.

The more indirect economic impact for Liberians is more difficult to assess, but is there nonetheless. Although most processing of Fante-caught fish is done by Fante women, the marketing of the processed product is handled by Liberians. Thousands of people must depend directly on this trade and thousand of others more indirectly (e.g. drivers, mechanics, people preparing food for or lodging long distance traders, etc). Or to take another example, the fuel wood supply for smoking and which generally is brought by lorry at \$ 150 a load to the smoking women by Liberian drivers after having been cut by Liberian lumberjacks : How many lorry loads are needed to smoke nearly 14,000 tons of fish ? How many local jobs are created just for this operation ?

The exact answers, of course, cannot be given, but the examples presented should be sufficient to illustrate that the overall impact of migrant fishermen in Liberia is most probably good for the country and, not to forget the, fishermen themselves. At the moment, because of the tragic circumstances in Liberia, there is no fishing done at all in the country. Many fishermen have been evacuated back to Ghana (9), and people are starving. Hopefully, the war will end soon, Fante fishermen may again be able to help feed the Liberian people.

Map II. Artisanal fishing settlements, Liberia



FOOTNOTES

1. The Fisheries Department quite readily admits (unofficially) that its statistics is based on inadequate and dubious field data. The last can readily be confirmed by our own attempts to obtain local catch statistics in 1986 & 1987 in Harper, Greenville and Robertsport. Despite four visits and many promises, not one figure was seen in Harper ; in Grenville a day's statistics from the landings of 7 canoes showed a more or less evenly distributed selection of such diverse species as barracuda, sardinella, ilisha, caranx, shark, sailfish, blackfish, butternose (threadfin), babablee, mackerel and bonga, all canoes but one having landed at least 15 kg of each. In Capemount, finally, all recorded catches of all species were 45 kg per canoe except for a few cases of 35 kg, again with great varieties in the catch composition.
2. According to unpublished government statistics (Bureau of Fisheries 1989) there were as many as 45 Liberian trawlers in the country, most of them in the 150 - 500 tons range. This seems rather excessive compared to previous years as shown in the table below, but may well take into account "flag of convenience" vessels registered in Liberia and operating in West Africa, but outside Liberian waters.

Number of industrial trawlers in Liberia

<u>1971</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>	<u>1983</u>	<u>1984</u>	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>
32	13	11	18	24	25	13	34	29	45

Sources : FAO Data base for 1979-87, Bureau of Fisheries for 1988

A relevant point here about industrial fishing vessels operating in Liberia is that most are actually foreign fishing for a "joint venture" company. Officers are usually European, Greek in particular, while the crew members to a large extent Ghanaians, usually Fante : another example of fishermen's migrations.

3. A sea league is equivalent to three nautical miles or 5.556 km.

4. In the beginning of November 1986 the mutilated corpses of two young boys were discovered in the outskirts of Harper, obvious victims of ritual murder. 33 Fante fishermen were promptly arrested as "suspects", but this resulted in violent actions by students of the local Polytechnic and other members of the population who, rightly it seems, suspected members of the town's elite to be the culprits. After heavy demonstrations November 5th, the Central Government agreed to an inquiry and at the end, several prominent people in Maryland county, including the county judge and the representative of the ruling party, were found guilty of the crime and sentenced to death.
3. "Today", of course, refers to the situation immediately preceding the current devastating civil war.
6. This was just after the introduction of the so-called "Doe-dollar" which at the time was 25 - 30 % less than the official rate of Liberian \$ 1 = US \$ 1
7. Thornes (1986) gives a figure of 317 large canoes for 1985, but it is in contradiction with all other figures from his Ministry.
8. Ratcliffe & Lindley report "a lifespan of up to 35 years" for the Ghana canoes in Liberia (1988 : 11), but this is clearly unrealistic.
9. In connection with the evacuation from Liberia of thousands of West Africans by ship in the beginning of September this year, including 780 Ghanaians from British Komenda, this village was visited 21/9 and 23/9 to find out about the fate of Ghanaian fishermen in Liberia. Here are extracts of the report (Haakonsen 1990) :
 - Ghanaian fishermen seemed to have fared better than many other groups during the civil war though they have not been allowed to fish since May/June.
 - The only confirmed casualties (by September) among Fante fishermen are from Buchanan where four were shot and killed when the rebels occupied the town. In Monrovia, some fishermen and their families have been wounded by stray bullets, but their main residence area (Westpoint) has been outside the main battle fronts.

- The fishermen based in Capemount (Robertsport) have managed to slip accross the border to Sierra Leone with their canoes and gear. Similarlily, a few based in Harper have crossed to Côte d'Ivoire, though some fishermen have been reported to be arrested by rebel forces in their "escape attempts". All other Fante canoes are still in the country.

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ARTISANAL MARITIME FISHERIES THE COTE D'IVOIRE *

by Karine Delaunay

1. Dominance and strength of Ghanaian fishermen1.1. The fishermen

In Côte d'Ivoire, artisanal marine fisheries at present is largely dominated by fishermen from other countries, while the Ivoirians are only represented by a few Alladian handline crews established near Abidjan. Along the rest of the coast, maritime fishing is no longer carried out except in certain villages, on an occasional basis or to supplement the diet. However, even if it is frequently considered that Côte d'Ivoire has no maritime tradition and although the lagoons effectively formed a protected area more favourable for fishing, sea fishing itself would appear to be an ancient occupation in the case of the Alladian ; it allowed early exchanges and underwent important developments at the beginning of the twentieth century. In addition, in the east and the centre of the country, the expansion of the plantation economy and the rapid growth of industrial fishing as of 1950 have turned the coastal populations away from "traditional" fishing on an individual basis. Meanwhile, the migration of youth to the towns, the inaccessability of the western region well into the 70's and the growth of the "Kroumen phenomenon" (men embarking as crew on board European vessels) did nothing to develop fishing other than as a small-scale means of subsistence.

Therefore, amongst the some 10 000 small-scale fishermen working on the Ivoirian coastline in 1989, 8 000 to 9 000 were of Ghanaian origin, especially Fante and Ewe, the others being mainly Liberian or Senegalese (1). The Fante fishermen, from the central part of the Ghanaian coast, are presently settled all along Côte d'Ivoire. Their expansion, which began at the beginning of the twentieth century on several different sites along the coast, is distinguished by their great ability to adapt to ecological and/or economic conditions, both in terms of the privileged sites chosen and the techniques used.

The Ewe fishermen (Anlo/awlan) (2) from the east of Ghana (more rarely from Togo) are mainly settled in the Abidjan area since the 30s. Their settling in Côte d'Ivoire is characterized by a certain stability in their place of settlement and in their fishing strategies (see Table 1).

* Translated from French.

The Fante and the Ewe are the two main groups of Ghanaian origin ; in addition, a community of Ga line-fishermen from the Accra area has settled in Abidjan since the 70s. As for the Nanakrou, organized in small units of 1 or 2 line fishermen from Liberia, and the Senegalese line fishermen using big motorised canoes, these groups are settled to the west of Côte d'Ivoire.

1.2. Production

Official statistics on small-scale sea fishing generally estimate the production at 15 000 to 20 000 t a year for the 80s, that is less than a quarter of the total national production (3). However, other estimates take this amount to more than 30 000 t a year for 1984-1985, thus comparing favourably to the tonnage landed by the industrial fleet based in the port of Abidjan (ECOUTIN et al.1990). The vitality of the small-scale sector is also shown by the noticeable development (these last 10 to 15 years) of fishing camps in the Abidjan area (near the port) where fishing Ghanaian units come to compete with the industrial sardine fishery by providing a cheaper and better quality produce (GUINGUENNO 1986) into the market.

Whereas, in the early stages (1950 and 1960) the rapid development of industrial fishing may have caused a crises for the artisanal fisheries, the latter have undergone remarkable expansion since the 70s while the industrial production tends to stagnate, even to diminish, and the import of frozen fish has been increasing to a great extent (4).

2. Organisation of Fante and Ewe fishermen : Migratory structures in Côte d'Ivoire

2.1. Fishing camps : structure of their establishment (5).

The Ghanaian fishermen's campsites, presently located all along the Ivoirian coast, make up the backbone of migration movements : they form a series of permanent reception centres around which seasonal movements and migrations as such (6), between Ghana and Côte d'Ivoire, and along the Ivoirian coastline, are organized.

Retracing the history of these camps exposes the fishermen's migrations, not as a straight-forward phenomenon only motivated by the search for fish, but as an expansion movement. Multipolar from the start, it is marked by advances and retreats related to ecological conditions and to the evolution of commercial outlets.

Fante and Ewe fishing camps are of different composition, the two groups having followed different patterns of expansion. It is also rare to find Fante and Ewe fishermen in the same camp and in the few cases this occurs (e.g. Vridi), they form two different communities, each having their own chief, organisation, etc.

Fante camps are a grouping of fishing units whose number varies from one site to another depending on the time of the year. The permanent campsite structure is ensured by a nucleus of practically sedentary fishermen, amongst whom are passed on the roles of headman, head fisherman and prominent persons. Although each camp practices numerous techniques, some grouping per type of production does appear between camps within the same area.

Among the Ewes, to the contrary, technical specialization according to campsite is very clear. In the Vridi camp near Abidjan, the units use purse seines while the other camps specialize in beach seining. In the latter case, because of the contiguity of teams along the coast, every unit tends to form an autonomous entity. However, a certain coherence is ensured in each sector by the presence of a headman, who is at the same time judge in internal matters and community representative in external matters.

2.2. Fishing units (7)

A. Production structures

A survey carried out in August and September 1989 on the Alladian coast (Ewe fishermen using beach seines) and at Sassandra (Fante) coupled with various interviews of camp headmen and craft owners, allows us to understand certain characteristics of the socio-economic functioning of the units. Generally, the boats belong to a sole owner, rarely a group of owners. This is usually a man of Ghanaian origin, more rarely a woman or an Ivoirian (8). The team is recruited in Ghana for a specific length of time, at the end of which the sharing of profits takes place back home, after a computation of expenses and earnings. However, the fishermen are sometimes recruited on the spot, in which case the earnings are shared out daily (in fish) or every week or month (in money). Married fishermen are accompanied by their wives while bachelors travel alone or accompanied by a "sister" (real or otherwise). Although not truly a part of the unit, these women have an important role to fulfil, in the smoking and selling of the fish. Usually the women buy the fish from the fishermen but only pay for it after it has been sold at the market, the profit made on the sale being theirs to pocket (any loss also being for their pocket). Thus each unit is associated with a group of women who sell the produce.

The surveys have also highlighted certain existing differences between Fante and Ewe units.

Ewe units use the same craft all year round. Beach seine units form large groups of about thirty men recruited in Ghana on a 5 year contract. These groups are characterized, on one hand, by the need to preserve the capital invested, combining a collective management of expenses to a very capitalist sharing arrangement (usually in 4 shares), and on the other hand, a very lengthy existence which sometimes spans over successive generations through inheritance on the paternal line. The Ewe owners also form a close-knit group in the centre of which are the distinguished or those who have been "successful", that is, those who have managed to put together several nets and are therefore at the head of several fishing units.

The nets used by the Fante units are of several types. In addition, the units using purse seines often have secondary gear at their disposal for seasonal use. The teams are made up of 3 to 15 fishermen according to the gear used. The ways in which the teams are put together, as well as the sharing systems, appear to vary. A contract is not necessarily signed upon recruitment and usually extends to no more than 2 or 3 years. In the case of purse seines units in Sassandra for example, the most frequently used system of sharing gives 3 shares to each input (canoe, motor, net) and one share to each fisherman. The running costs (fuel and everyday net maintenance) are charged to the units while repairs, replacements and investments are solely the owners responsibility (however, the latter may borrow from the communal account). Generally speaking, such units sell their catches not only to the fishermen's wives, but also to other women with whom they do business so as to have cash available every time they come to shore. Also, if at present most of the units are run on the basis of single ownership, in the early 60s collective ownership was very frequent (SURGY). Lastly, the longevity of a fishing unit appeared shorter and the concentration of the means of production by one person appeared less frequent and less important than among Ewe fishermen.

2.2. Migration factors

In most cases, the fishing units presently found in Sassandra and especially on the Alladian coast, were created in Côte d'Ivoire, even though the owners primarily came with units created in Ghana. This however does not imply that ties are broken with the native country or that periodical or definitive movements back do not take place.

Within the teams, their operating principles imply periodical splits leading to the return of the fishermen-crew members to their native country. However, the teams are frequently centred on a core of permanent fishermen, often members of the owner's family, particularly among the Ewe. In addition, on-the-spot recruitment as practiced by some headmen and possible debts contracted with the owner are factors contributing to prolonged stays for the "employees".

The migrations and settlements of the fishing units tend to follow that of their owners. In this respect, the Ewe units using beach seines are characterized by their permanence in Côte d'Ivoire, in a limited area, even though certain owners invest in nets back home as they grow old, so as to eventually return to Ghana, or they maintain shares in "family" nets operating in Ghana.

Although quite large cores of more or less sedentary Fante owners can be found in nearly all camps, mobility remains an important element in the operation of Fante units. It essentially occurs between Ghana and the Côte d'Ivoire, and along the Ivoirian coastline. These temporary or seasonal moves can be motivated by the abundance of fish, but also by the prospects of better prices and the search for cash (9) ; they can also provide the opportunity to buy cheaper equipment. In addition, a number of Fante owners might have chosen a policy of spatial risk spreading, by having a boat operating in Côte d'Ivoire and another one in Ghana. The settling in Côte d'Ivoire may have been preceded by earlier migrations to other countries, especially to Benin for the Ewe and Liberia for the Fante. I have not been able, however, to pinpoint definitive departures from Côte d'Ivoire.

3. The role played by Fante and Ewe Fishermen in the Côte d'Ivoire : migrants or immigrants ?

3.1. Relationships between the Ghanaian fishermen and the Ivoirians

Relationships between the fishermen and the Ivoirians, whether with the authorities or with village people, are certainly complex. The migrant nature of the Ghanaian fishermen make them an uncontrollable and suspect population, but one cannot ignore the important impact of this same population on the economic life along the coast, directly through its fishing activities, and indirectly, by the financial resources it represents and the parallel activities it sustains. The Ghanaian fishermen amplify this economic role, but each individual knows his situation is precarious (the Ewe still recall the expulsion measures against them in 1958 ; very recently Ghanaian fishermen's homes were destroyed on the Aby lagoon).

If in mutual exchanges between communities are distant and distrustful, individual relationships can exist with respect to mutual favours rendered (for example, fish supply made easier in return for tolerance of certain deals).

Ivoirian politics are also complex with regards to maritime fisheries, especially to the role given to fishery centres created in the west of the country. One of their main preoccupations is supposed to encourage the native population in taking up fishing so that the country's natural resources do not enrich foreigners (10). Another aspect of their activities has been the creation of cooperative groups (Groupements à Vocation Coopérative -GVC-), through which fishermen have had access to loans from Ivoirian banks and to tax-free petrol. However, the enforcement of these measures has been problematic, having to come to terms with the internal organization in the camps while adhering to a desire to modernize small-scale fishing but also to encircle and control it.

As for the spreading of fishing techniques, the Ghanaian fishermen have had little or no effect on the Ivoirians ; not that attempts have not been made to adopt Ghanaian techniques. The Government even supported these efforts it saw as a means of modernization, but these attempts ended up in failures.

In the case of villages of the Alladian coast who attempted to adopt the beach seines in the 50s and 60s (10), it would appear that failure was due to sociological problems rather than a technical incapacity or a lack of know-how. These attempts appear as an achievement of the new social relationships brought about by the development of plantation agriculture ; their failure seems to stem from the fact that net owners (often important planters, chiefs or village headmen) could not pin down the village workforce they hoped to mobilize using their hierarchical position in the lineage (the young people refused to be "proletarized" in this manner).

3.2. Reasons behind migration

Generally the fishermen explain their presence in Côte d'Ivoire by their taste for travel and the need to leave their families behind in order to make some savings ; reasons previously noted by A. de SURGY some 25 years ago. However, these explicated personal motives appear insufficient in accounting for the complexity of the phenomena at stake in expansion process of Ghanaian fishermen in Côte d'Ivoire.

As already shown, Ewe and Fante migrations are inspired by different dynamics.

For Ewe owners along the Alladian coast (beach seining), migration lead to real establishment ; this has allowed the setting-up of a network of hierarchical relationships, which tie the group up and in which the possession and accumulation of capital is translated in term of social power through increased prestige.

With regard to the Fantes, migration appears to have been inspired originally by the desire to find funding sources in Ghana, outside the "traditional" circuits, trough the creation of collectively owned units which later made possible the local emergence of a group of owners. The migratory forms underwent some modification, but the search of profitability and gain than among appears stronger the Ewe group. This is expressed by the greater mobility of Fante units and more diversified fishing activity. Thus, in as much as it is not linear, the expansion of the Ghanaian fishermen in the Côte d'Ivoire is neither uniform nor univocal.

However, if their presence in the Côte d'Ivoire appears to be the result the above phenomena, the fishermen nevertheless maintain firm ties with Ghana. They have houses built and invest in nets and plantations. They also portray a true migrant spirit in declaring themselves prepared to travel to other countries should presently strained situation in Côte d'Ivoire deteriorate.

Notes

1. According to figures produced by the CRO in Abidjan (J. KONAN) based on lists established by CRO agents in the east and centre of the country and those of Centre de Pêche in the west. Unfortunately, the total figures do not specify the distribution of fishermen according to ethnicity and origins.

2. These fishermen are called "Awlan" in the Côte d'Ivoire, which is very derogatory (Awlan is particularly associated with human sacrifice). The confusion made between the ethnic name Anlo and the Awlan term probably explains why the fishermen of this group established in the Côte d'Ivoire call themselves Ewe. By assimilation, they are also called Beninois or Popo, having been accepted by people of that origin (as in Tabou) or having previously migrated to Benin themselves.

3. Although estimations vary concerning the volume unloaded per type of production, one may retain those established by J.Y. WEIGEL for 1984 in order to give an idea of the relative importance of different fishing types of within national production.

Industrial fishing	31 960 t
Small-scale fisheries	18 000 t
Lagoon fishing	12 500 t
River and lake fishing	16 000 t

4. These imports rose to the record figure of 140 000 t in 1989, representing FCFA 20 billion (Direction des Pêches, Abidjan).

5. The Ghanaian settlements are generally located on the outskirts of towns and native villages. Although their houses are mostly flimsy structures, they are permanent. The fishermen have their own authoritative structure (with a chief and notables), but each is dependant on the town or village that has allowed him to settle there and more often than not, deducts taxes or fees for this privilege. These characteristics lead us to consider these settlements as camps rather than villages or quarters.

6. Distinction made by JORION (1988)

7. The fishing unit as portrayed here is made up of technical assets belonging to one or more owners and of a team (including or not the owners). Each element may evolve or change. Both a working unit and a management unit, it is also the scene and expression of certain social relationships and as such, may last a long time- beyond going to sea and beyond the accounting exercise taking place between 2 rounds of recruitment and sharing.

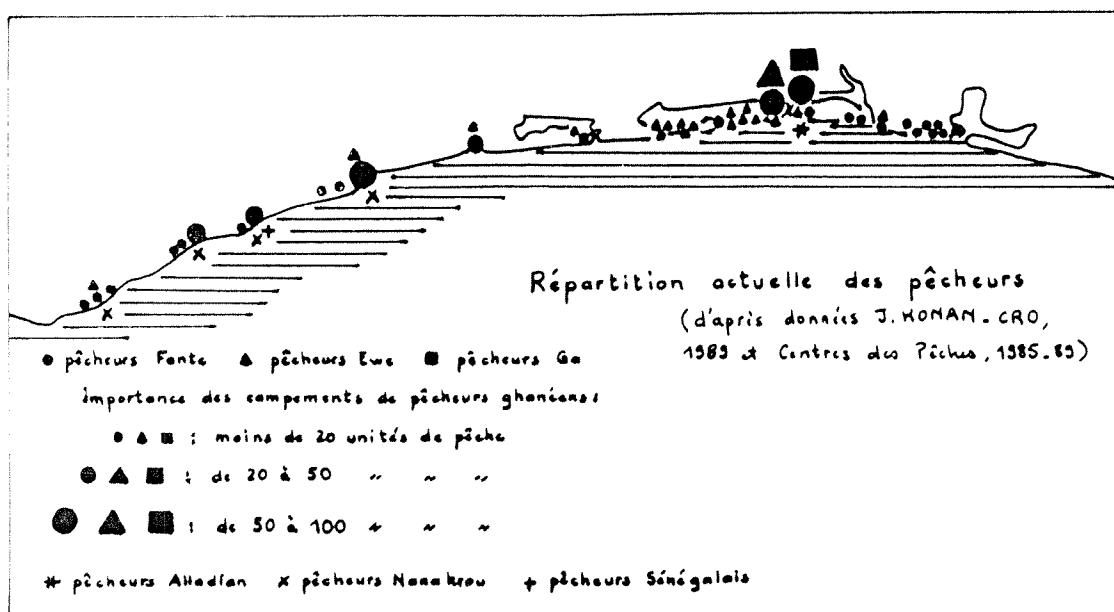
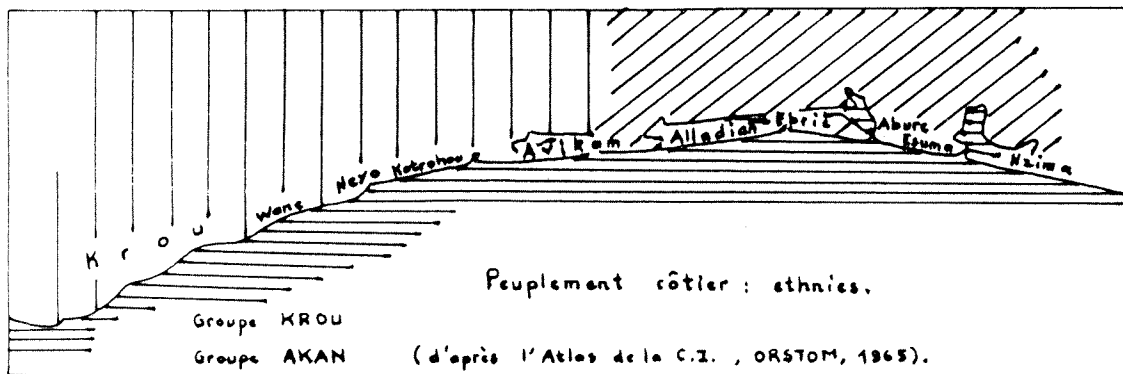
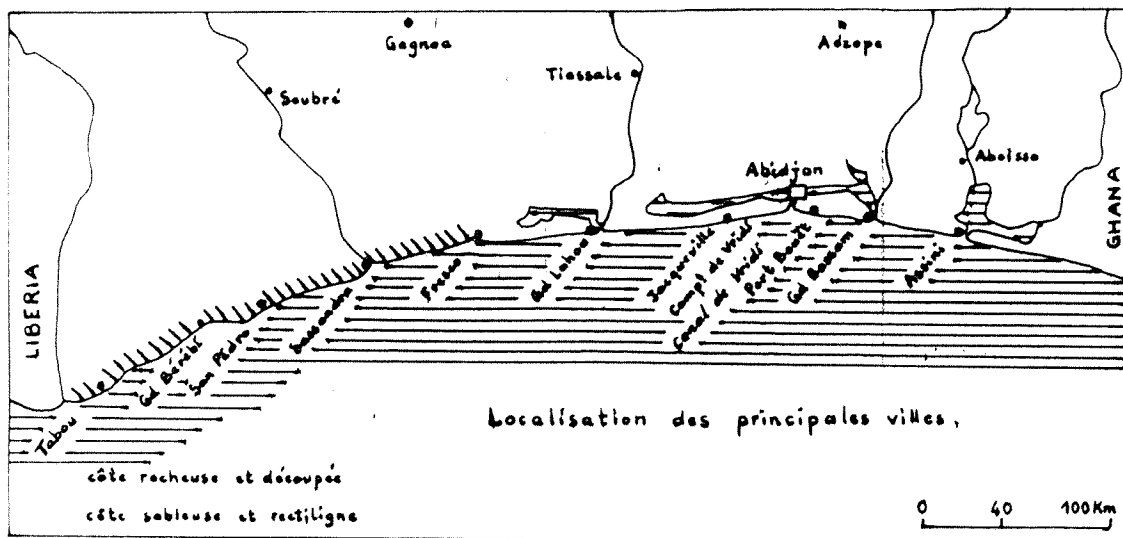
8. The role played by these factors in financing fishing activities -especially that of the women- cannot be neglected.

9. Although a group of women usually comes along the teams moving in to settle, Fante crews migrating on a temporary base usually go just by themselves ; they have then to give their production to women they have no regular relations with and who are not in association with the team. The fish is then to be bought cash, with no discount.

10. This idea is clearly displayed in certain articles published in the daily national "Fraternité Matin", one of which is significantly entitled "Fishing in the south-west : a lucrative activity slipping away from the native population". It had an insert saying : "Encourage the young to fish" (19.09.1989).

11. Generally these villages first tried to adopt the sardinella surrounding net, but the growth of industrial sardine fishing forced the Alladian to abandon this type of net.

Maps of the Ivoirian Coastline



The evolution of Ghanaian artisanal fisheries in Côte d'Ivoire

Periods	1st phase: beginning XX cent. - ca 1970	Ca. 1950 : BEGINNING OF INDUSTRIAL FISHERIES		Ca. 1970 : BEGINNING OF FROZEN FISH IMPORTS	
General characteristics	First Ghanaian fishing settlements in various points along the Ivoirian shore.	2nd phase: ca 1950 - ca 1970	Opening of Abidjan port and development of industrial fisheries Artisanal fisheries in crises.	3rd phase : since ca 1970	Stagnation of industrial fisheries production. Rapid increase of frozen fish imports New impetus for the artisanal fisheries and that of the Fante in particular.
Fante fishermen	Establishment of camps in the coastal ports, main axis being Gd Bassam, Abidjan. Exportation of fish towards Ghana. Use of encircling sardinella gillnets (<u>adi</u>) from non motorized canoes ; use of setnets (<u>tenga</u>), also from non-motorized canoes.	Geographical and numerical reduction, abandonment of the Abidjan area. Focus of settlements-west in Sw C.I. (Sassandra) End of fish exports to Ghana Use of <u>tenga</u> set-nets from small non-motorized canoes ; decline of <u>adi</u> first and then revival linked (?) to the introduction of the motorized canoes around 1960. A few attempts of adopting the beach seine.		New geographical and numerical expansion with greater density of settlements along the Ivoirian coast. Diffusion of the purse seine (<u>seef</u>) from large motorized canoes, reconversion of the <u>adi</u> into common drift net. Use of <u>boso</u> drift nets from motorized canoes, <u>tenga</u> nets employed from small non-motorized canoes.	
Ewe fishermen	Establishment of a settlement in Port Bouët which extends eastwards, small settlements in Tabou and Gd Lahou. Various types of beach seines (<u>yevudi</u>) : <u>kpâkpâdo</u> or <u>fafalo</u> for mackerels, <u>deido</u> for sardinella, <u>abodibo</u> for anchovies Also sardinella drift net (<u>ali</u>) . Non-motorized canoes.	The fishing units try to prevail but with great financial losses while fishermen quit for jobs in the port. The Ewe women from Port-Bouët Bassam take over the trade of sardinellas landed in the port Use of beach seine (<u>yevudo</u>) (the <u>kpâkpâdo</u> tending to disappear) from non-motorized canoes Abandonment of the <u>ali</u> net.		Most units settle west of the Vridi canal at the expense of the Port Bouët settlement. Ewe women tend to loose their monopolistic position in trade of fish landed by the sardine vessels (sardinières) Tendency of amalgamation of the <u>yevudo</u> and the <u>abodibo</u> seines, the others having disappeared, still non-motorized canoes. Adoption of the <u>watsa</u> purse seine from large, motorized canoes - limited to the Vridi settlement.	

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MIGRATION OF FANTE FISHERMEN

by

Irene Odetei

Introduction

The Fante of today comprise the Efutus, the Etsis and the Borbor Fante whose territory is bordered on the West by the Achantas and on the East by the Ga-Adangbes. They belong to the Akan ethnic group which is the most predominant in Ghana. Their main traditional occupations are fishing and farming. Of these activities, fishing has taken them to all the coastal areas of Ghana and beyond. Fante fishermen are found in practically all the West African countries especially Liberia, Sierra Leone, Gambia, Côte d'Ivoire, Republic of Benin and Nigeria. Migration of Fante fishermen is therefore a phenomenon which cannot be ignored by anyone interested in fishing in West Africa. In this regard they are like the Ewess who have been called Pan-African fishermen by Poly Hill. (1963 : 64).

Historical Background

Migration itself is a central theme in Fante history. According to Fante oral traditions, the Borbor Fantes, who were the last group to settle on the Fante Coast, migrated from the inland town of Techiman in the present Brong Ahafo Region. When they arrived on the Coast, they founded states, towns and villages. Both fishing and farming were identified with the Fantes.

The fishing industry was thriving on the Fante Coast before the first Europeans arrived there in 1471. This is confirmed by Pacheco Pereira, One of the Portuguese who founded the Castle Sao Jarze da Mina in 1482 and was governor there from 1520 - 1522. In his book, Esmeraldo de Situ Orbis, he states :

Twenty leagues beyond Cabo do Carco (Cape Coast) is a promontory which we call Cabo das Redes because of the many nets that were found here when this land was discovered... . All the country between these two Capes is fairly high and mountainous ; Fante the Greater, Fante the Less and Sabuu the Less (1) (Pereira 1518 by Kimble 1937 : 122).

By the time the Europeans arrived on the Fante Coast, economic activities and prospectus appeared prosperous enough to attract them and, later, to persuade several other European nations (2) to struggle and fight for the opportunity of trading on the coast and bulding permanent trading forts, castles or lodges which have survived to the present day. When the Europeans arrived, the Fante had already established trade links stretching to North Africa, eastwards to Benin and westwards to the Ivory Coast. They sold salt and fish to the inland traders in exchange for gold and cloth. From Benin they also obtained cloth, beads and slaves and from the Ivory Coast, cloth in exchange for gold (Daaku 1970 : p. 6). By the end of the fifteenth century the Fante were engaged in exports and imports by both land and sea. The arrival of the Europeans intensified these activities to make the Fante Coast, which was part of the then Gold Coast(3), the most lucrative place for Europeans in the whole of West Africa.

One group of people whose importance escalated were the Fante, sometimes referred to as the "mina"(4) fishermen. Since there were no natural harbours, Europeans had to depend on these fishermen is canoes to load and unload goods from their ships and take them to their warehouses on land.

Oral traditions also indicate that maritime fishing was an important industry among the Fante. All their equipment were locally made. Their canoes were made from a single tree trunk and the nets and twine form the bark of trees or plants such as the sisal. The hooks were made by local blacksmiths. The canoes were propelled by paddles made of wood and mat sails made from reeds and rushes. As the Fantes observed the fishing seasons and the migratory patterns of the fish, they developed a tendency to move with the fish. The abundance of fish and the lack of fishing skill by their neighbours on the Coast rendered this migration very attractive and rewarding.

Fante fishing expertise was acknowledged by both the Europeans and Africans. This expertise began to spread to other parts of the Gold Coast (Ghana) and beyond. According to the oral traditions of the Ga, sea fishing as is known on the Ga Coast today was introduced by Fante fishermen. Fante fishermen also settled in Aneho (little Popo), in the present republic of Togo, in the seventeenth century. This means that both fishing and migration of Fante fishermen are backed by centuries of experience.

The Europeans exploited the expertise of the Fante fishermen by employing them or taking them as pawns to work for them in areas where they were building or had built forts or trading ports. This service became even more important during the era of the slave trade from the seventeeth to the nineteenth century, when slaves had to be fed and transported on the sea.

Political factors also caused migration. Such movements were caused by civil wars among the Fante and conflicts with the Europeans in the forts and castles. (Daaku : 1970, p. 94-5). The Europeans who claimed jurisdiction over and monopoly of trade with the local people living under their forts and castles sometimes resorted to brute force and used their canons against the very people they claimed to protect.

The end result of the migration of the Fante fishermen was the spread of their fishing skill along the coast. It appears that even among the Fante, the people of Elmina, Komenda and their neighbours developed the migrating tendency more than any other group. On an anonymous Dutch map of 1629 (Daaku and Van Danzig : 1966), 'Mina Fisher's' were shown to have founded settlement in the other States east of Eguafu, where Komenda and Elmina were situated. As the Fantes traded with the Europeans, they began to rely on imported fishing materials and gear and were quick to adopt new fishing techniques.

As the Gold Coast moved into the colonial era under the British from 1874 - 1957, the world wars, independence and change of governments, economic hardships and recovery programmes, the patterns, motivation and destination of Fante fishermen began to undergo changes.

Patterns of Migration

From studies undertaken in Senya Bereku, Winneba, Apam, Komenda, Elmina, Axim, Half Assini, Ivory Coast and the Republic of Benin, it became clear that there are three patterns of migration.

One, seasonal movements of fishermen in pursuit of the fish during the sardinella season from July to September, when the fish has left for other localities, is an accepted feature of fishing on the Fante Coast. Formerly, there was a lot of movement eastwards to the Ga Coast but now the movement is mainly westwards, especially to Axim and Half Assini. In this particular situation the fishermen are totally dependent on their host communities. They normally travel with a young boy or girl between the ages of 12 - 16 to cook for them, in most cases under the supervision of a local hostess who sees to their accommodation and the marketing of their fish. This hostess acts the role as their fishmother whilst they are in her locality. She renders accounts to the fishermen at the end of their stay. This type of migration is common to all the Fante towns. The fishermen normally return home for Christmas, then move again during the minor season only to return once more for their annual festival and to prepare for the sardinella season in their own locality. (Hagan : 1983). This pattern of migration has been greatly affected by the introduction of the outboard motor which has made

possible for fishermen to fish in waters which would have been considered far from home in the old days and to return the same day. This means that fishermen who do not want to migrate but were compelled to do so can now stay at home and fish in other waters.

The second pattern lasts longer than one fishing season. This takes place within Ghana. The fishermen still depend on local hostesses, but are, however, visited occasionally by their wives. They do go home for annual festivals or important funerals. With the construction of the Volta dam, some of the fishermen have started migrating inland to Yeji.

This pattern of migration has a tendency of becoming semi-permanent or permanent. The wives eventually join their husband. From such 'secondary hometowns' fishermen make seasonal movements to other places. A process of integration takes place in such cases till the migrants become completely absorbed into the social structure of their host towns. This is especially so in cases where migration takes place into other Fante towns. Where migration takes place into areas of a different ethnic group, traces of Fante origin can be identified. As stated earlier, Fante are credited with the introduction of maritime fishing into the Ga Coast, an area of different ethnic group. Peoples of fante origin are found in practically all the Ga towns. In Labadi, the people of Abese Fante, a subsection of the Abese quarter, are supposed to have migrated from the Fante town of Moree to Labadi during the nineteenth century. The fishermen came with their sister to cook for them. She married a local man and the group never returned. These people are now fully integrated linguistically and socially. They can only be identified by some of the Fante names borne by the individuals (Odotei 1989). Some of these migrants attain eminent positions in the society. For example, the present chief fisherman of all the Ga people is called Abew Chiriquanda, a name which shows Fante origin.

This pattern of migration is closely linked to the third, which concerns migrations to other West African towns. In this pattern, migrants tend to stay for longer periods culminating in permanent residency in some cases. The case of the Fante settlers in Azurretti in Côte d'Ivoire is an example. Having migrated from Asaafa more than sixty years ago, their settlement has acquired permanence. Wood and thatch have given place to cement block buildings, they also have their own chief and perform Fante customary rites, reminding themselves of their history through traditional Asafo songs when the occasion demands. According to the elders of the village, they moved westwards from Asaafa travelling in stages. They settled at Nzima in the western region of Ghana and then moved to Azurretti in Ivory Coast.

Although occasional visits are made by the migrants to Asaafa, four generations have been born there, the younger ones knowing Asaafa only by name. In fact, the younger ones claim they are discouraged from visiting Asaafa by the older ones. There is no constant arrival of fresh immigrants and no departure of old ones after a period of stay. This is due to the fact that though Asaafa is a coastal community, the people do more farming than fishing. The town depends mainly on Ewe immigrants for their supply of fish. Only two local people own canoes and fishing gear. Fishing in Azurretti itself is not as developed as in the other Ghanaian migrant settlements in Côte d'Ivoire. The fishermen use unmotorised canoes with gill nets (Tenga).

In contrast to Asaafa, the Fante fishing village of Imuna thrives on migration, both national and international. Imuna fishermen normally travel to Half Assini in the Western Region and return home for their festivals. On the international scene Imuna fishermen have settled at Akpakpa Dodome in the republic of Benin. There is a constant movement between Imuna and the various places where they fish. The town itself relies exclusively on Ewe immigrants fishermen for its supply of fish at certain times of the year. The reason given by the fishermen for their leaving Imuna for other places is that the beach is very dangerous for landing their canoes.

Of all the Fante towns, the best known and most organised group for migration is Komenda. Komenda fishermen are found in Ivory Coast, Liberia and other West African countries. Indeed, fishing in Komenda is backed by centuries of expertise. Komenda fishermen as experts in migration are acknowledged by all the Fantes.

Causes of Migration

The main cause of migration is economic gain. Fishermen migrate to be able to accumulate capital. The structure of the society is such that accumulation of capital is a difficult if not an impossible venture. The extended family system ensures that whatever money one acquires benefits the rest of the members. A man may find himself paying for food, health and education not only for his own children but also for nephews and nieces, brothers and sisters, cousins, parents, in-laws, etc. In addition to this, there are social occasions like funerals, births, marriages and festivals when the respectability of the whole family is at stake. A man has to display his mettle on such occasions. It is also an accepted practice among fishermen to buy drinks and food and give money to friends whenever money is available. Unfortunately for the fisherman his income is an open secret. It is therefore impossible to escape this obligation being aware that financial hazards in fishing are such that he may be obliged to depend on others when he is in need. In order

to accelerate the accumulation of capital the fishermen move to hard currency areas. This is why Liberia is very popular with the Fante fishermen, especially Komendans.

Some of the fishermen stated honestly that they migrated in order to escape family obligations. Others are also pushed out by debts and other social problems. The general economic situation in the country also affects migration. At the time when fishing inputs were not available in Ghana, fishermen migrated in order to replace or repair their work out or damaged gear. Even when they are available, the cost of the acquisition of new gear is so high that fishermen have to follow the fish to ensure fishing throughout the year to pay for the equipment. The 1983 food crisis in Ghana also increased the number of Fante fishermen who migrated to other West African countries. Some of the Fante towns like Koramantse and Winneba gave 1983 as the year when their fishermen started migrating to other West African countries.

In addition to the economic attraction, some of the fishermen migrate to gain recognition in the society. They believe that the cultural change experienced during migration brings enlightenment and refinement. An example is that of a group of Komenda fishermen who on their return from Monrovia donned themselves in the same type of prestigious cloth, and each of them holding a torch and wearing a wristwatch paraded the streets of Komenda in the night singing, "we have come back from Monrovia, who is not wearing a wristwatch ?" With this question they made an ostentatious, simultaneous gesture of looking at the time on their wristwatches. What these fishermen wanted to say was that they had acquired refinement during their stay outside.

It appears that a migrating mentality has developed especially in Komenda and Imuna to the extent that some fishermen migrate because others have migrated. The migration mentally is enhanced by the existence of the clan system among the Fante and other Akan groups which transcends state or town barriers. A member of a clan is welcomed by another clan member and treated as a family member regardless of his or her state or town of origin.

Organisation

Both individual and group migrations were observed. There are cases where individuals who travel outside to work divert into fishing by joining a fishing crew when they have problems finding a job. Some people also migrate purposely to fish but go as individuals. At Akpakpa Dodomé in the Republic of Benin some of the Fante fishermen claim to have originally worked on fishing vessels. When they reached Cotonou and saw that the fishing there appeared to be good, they decided to leave the ships, buy their own gear and settle there to do gill net (Tenga) fishing.

Group migration is organised on what is known as the "company" basis. The company is a group of fishermen who have contracted to work together for a length of time. (Nukunya 1989). After the contract period, accounts are settled, each fishermen receiving his share of the proceeds. He can then decide to leave the company or continue to work under a renewed contract. The duration of the company depends on its type and on the target set by the group. Two types of companies were observed. In the first type, the canoe and gear are already available, owned by one man or a family. The owner may or may not travel with the group. He is responsible for major repair work and replacement. At the close of business, the owner gets 50 per cent of the proceeds and the crew gets the rest. In Komenda, the owner gets fifteen shares whilst each crew member gets one share. The second type of company has so far been observed only in Komenda. In this type, the company owns the gear. The group takes a loan to buy the gear, and they stay together till the loan is paid. After payment, they may decide to continue working together. In some instances, a member of the company may decide to leave. The gear is then valued and his portion is paid out to him. If the whole group decides to break up, the gear is sold with the bosum getting the first option of purchase. Sometimes he is given the canoe, outboard motor or net as a gift by the rest of the crew depending on how he played his role as bosum. Loans are normally obtained from individuals and they attract fifty to hundred per cent interest. Occasionally, they are given free of interest depending on the relationship or services rendered or expected to be rendered.

The Fante fishermen travel in their canoes usually fitted with a Yamaha 40 outboard motor. They use two drums of fuel to make the two to three days journey to Côte d'Ivoire and four to five drums of fuel to travel four to five days to Liberia or Lierra Leone. Their wives join them by land or air. They either live in rented rooms as in Vridi III in Côte d'Ivoire and Placondji in the Republic of Benin or in temporary structures erected by themselves as in Akpakpa Dodome in Republic of Benin and Grand Bassam in Côte d'Ivoire.

Whilst the fishermen are staying outside, strict discipline is maintained. They have their own set of rules and regulations and try their best not to get into conflict with the local people. They work harder than at home without the daily interruptions of funerals, birth, marriages and sicknesses of relatives which hinder their work at home. All professional or personal problems are solved by the bosum or owner who acts as a father. He fines fishermen for bad behaviour and rewards hard work. He takes care of their health needs and lends them money when the need arises. He sees to it that a member of the crew who has reached marriageable age gets a wife preferably sent from home. He also advances money for the purchase of a few personal

items to be taken back home. To avoid wastage and ensure the maintenance of discipline, each member of the company has someone who stands in as surety back home, usually fathers for their sons. The guarantor is expected to pay any debts incurred and it is to him that the share of the proceeds is paid at a meeting of company members and guaranters called for that purpose when they return home. Each canoe goes with a clerk who keeps accounts. Among the Fante, international migration could last from three to fifteen years or forever. Some fishermen who become professional migrants having stayed in many West African countries and towns at one time or another.

During the stay outside of the migrant fishermen, proceeds are repatriated from time to time through women traders or someone specifically sent for the purpose. According to the fishermen, as migrants they could be forced to leave host country at any time. They therefore had to ensure that they had their money back home as a security measure. The recent war in Liberia and disturbances in Côte d'Ivoire have proved the fishermen right. Most of the Ghanaian fishermen in Liberia came home empty-handed. They therefore have to rely on monies they had already repatriated to settle their accounts.

Effects of Migration

Fante fishermen claim that they introduced maritime fishing to some of the areas they settled. Even when the people engaged in maritime fishing, as in Liberia, the Fantes claim to have introduced new methods to these places. They also introduced new foods, fashions and other cultural practices.

The fishermen come home having been affected by the migration professionally, economically and socially. The long distance hand-lining method of fishing known as 'Awam Sea' or 'Lagaz' which has been introduced to the Fante coast was copied in Côte d'Ivoire from Senegalese and later Ga-Adangbe fishermen. The difference between the migrant fishermen and those who stay at home is especially noticed between the first four to six weeks. They make sure they wear cloth of the same fabric and design for group identification on some occasions. There is conspicuous spending of money on luxury food and drinks. They come back with items such as radio cassettes which they display outside their homes especially in the late afternoons and evening to gain the respect of passers-by. Migrants also use the money to buy furniture, build their own houses, renovate, complete or extend family houses. Those who do not have enough to put up their own houses contribute to the extension or building of family houses. This is made more feasible in Komenda by the practice of paying the earnings of youngmen to their fathers when they return home after migration. These latter are then able to combine the resources of their sons for such a venture, making provision of a room for each son. As the earnings of fishermen

improve through migration, fishermen are able to contribute to development projects in the towns. The chief fishermen send emissaries to Fante fishing communities outside Ghana whenever their contribution is needed.

The effect of migration on the individual is thus closely linked with the development of the whole town. As fishermen leave their hometowns to stay outside, overcrowding is also avoided. The war in Liberia resulting in the return of Komenda migrants exposes this factor. With the return of the migrants accomodation has become a problem in Komenda. Migrants who have been away from home for years have returned with their children and now have to be accomodated by their relatives.

As in all business ventures, migrants also have their stories of failure. In such cases migrants just resign themselves to staying in the host town country afraid to face the scorn of their relatives and friends on their return home. In some cases even the means to go back home is a problem. For example, some of the Fante migrants at Akpakpa Dodome informed me that they wanted to return to Ghana and asked for the possibility of a ship being sent to them for that purpose.

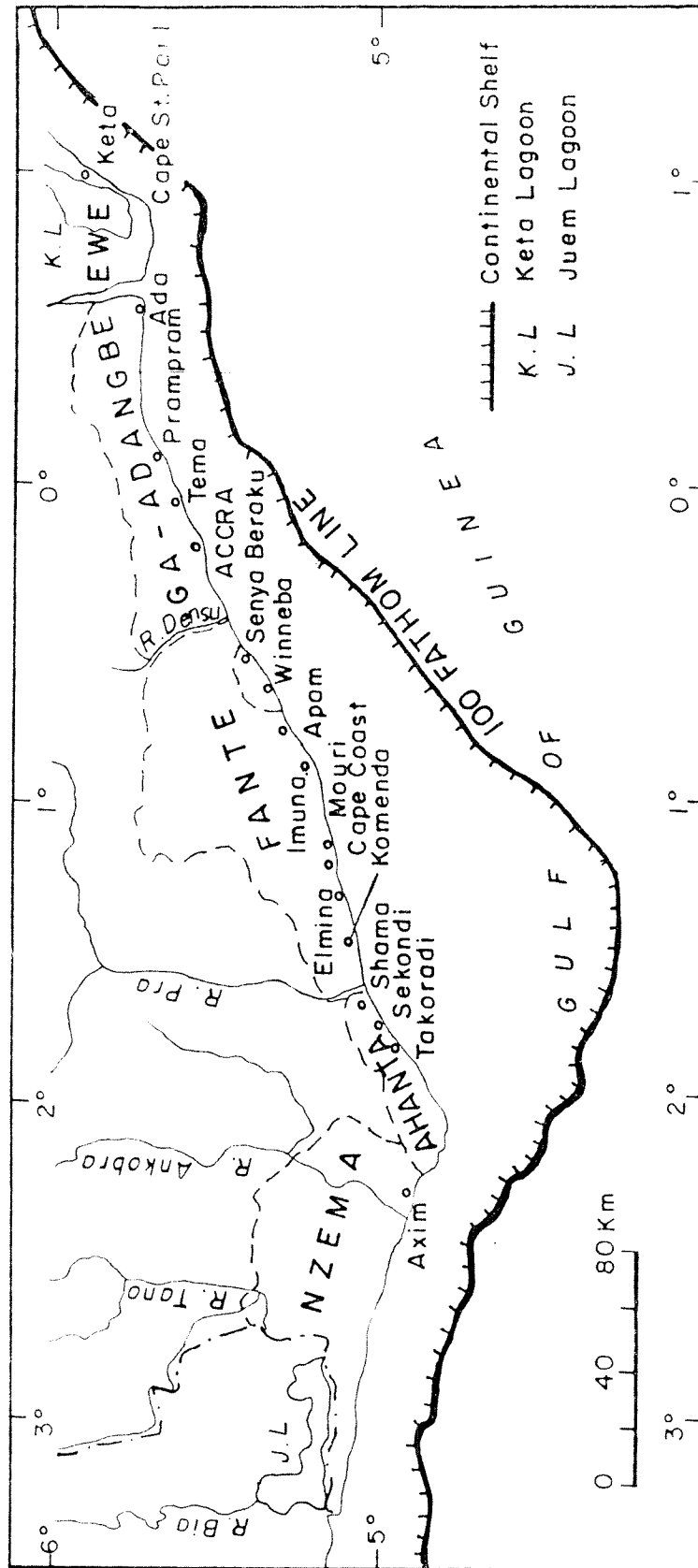
Conclusion

Migration of Fante fishermen, which has been taking place for centuries, has been and continues to be of immense benefit to the Fantes themselves and to the societies where they migrate to. It has led to the spread of fishing techniques not only in Ghana but in the rest of West Africa. The Fantes, like the fish which they catch, are not barred by national boundaries even though the sometimes face difficulties with law enforcement agents in their host countries. Their main concern is the threat posed by industrial fishing and the depletion of fish stocks in West African waters. There is no doubt that the subject needs an in depth study in order for the scope, patterns, causes , organisation and effects of migration to be fully appreciated.

Notes

1. This is identified with the fishing town of Mouree in the Asebu State called Sabou by the Europeans.
2. The Europeans who traded on the Fante Coast and the whole coastal stretch of modern Ghana are the Portuguese, Dutch, English, French, Swedes, Danes Brandenburgers (Part of Modern Germany).
3. The Gold Coast before it was declared a Colony by the British in 1874 stretched from Assini in the West to the River Volta in the East and northwards to an undefined border in the Brong Ahafo Region.
4. Mina is derived from the da Mina or Elmina - the name given to the village of Edina by the Portuguese on account of the abundant supply of gold obtained from the place when they first landed there. The town has retained its name Elmina. The term Mina was used to describe Fantes especially those living near Elmina, Komenda and their immediate neighbourhood.

THE COAST OF GHANA SHOWING SELECTED FISHING CENTRES,
ETHNIC BOUNDARIES AND THE CONTINENTAL SHELF



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MIGRATIONS IN ARTISANAL MARINE FISHERIES AMONG GA-ADANGBE
FISHERMEN AND WOMEN IN GHANA

Ellen Bortei-Doku [1]

1. INTRODUCTION

Fishing constitutes a major activity and reference point for the economic, social and political organization of the traditional fishing communities of Ga-Adangbes, in the Greater Accra Region of Ghana. It not only provides subsistence for the people, but also influences the leadership structure, and the cultural and spiritual organization of the people.

The survival of marine canoe fishermen in the traditional setting is very dependent on their ability to exploit the sea successfully at all times. Within the context of the existing traditional division of labour, women rather than men have direct authority over fish after landing, for processing and marketing. Fishermen therefore need to sustain their access to fish in the fresh state in order to maintain their livelihood. Pressures to continue fishing all year round are compounded by the lack of, or the high cost of modern technology which would enable fishermen to freeze fresh fish for sales during the minor fishing period.

Migration in pursuit of migratory fish stocks is therefore an essential back-up activity for the subsistence of fishermen. This paper examines migration among Ga-Adangbe fishermen and women, in terms of their patterns, motives and socio-economic arrangements largely from the ports of departure and at the receiving communities. It is perhaps worth mentioning briefly at this point the key role that artisanal canoe fishing plays in the Ghanaian economy on the whole.

Several reports already exist that show the contribution that canoe fishermen make to total fish landings in Ghana. Available statistics indicate that this sector landed half to two-thirds of the total domestic catch between 1984 and 1989. Table 1 below gives some evidence of the significance of canoe landings in domestic fisheries.

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Table 1: Total Annual Landings of All Fishing
Fleets, 1981-1986 (weight m/t)

Year	Canoes	Inshore	Industrial	*Total
1981	149,824	15,363	4,193	169,380
1982	131,201	16,357	8,049	155,607
1983	137,028	15,084	9,337	161,449
1984	171,234	14,704	7,257	193,195
1985	159,899	17,980	13,881	191,760
1986	190,197	21,894	14,077	226,168
1987	262,384	14,931	20,171	297,486
1988	244,042	7,414	16,042	267,498
1989	220,878	12,657	23,073	256,608

Source: Department of Fisheries, Ministry of
Agriculture, Ghana.

* The totals do not include catches from shrimp
vessels and tuna vessels (as indicated in the
1988/89 statistics).

Several reports have already been written on the technological changes that have taken place in the canoe industry, by the Fisheries Department in Ghana. Others have documented some of the socio-economic features of the industry, including reports on the economics of canoe fishing (Kwei 1961; Lawson and Kwei 1974; Azu 1966; Vercrijssse 1984; Seini 1977;).

Not much work has been done on the relationship between modern industrial fishing and the artisanal sector in Ghana. But the indications are that they complement each other rather than compete. This is not to discount conflicts that have arisen in the past over the violation of "boundaries" and the destruction of canoe nets by big trawlers, especially the inshore beach seine used by Tsaani Canoes.

Ga-Adangbe fishermen like their counterparts in other coastal regions in the country, regard migration as an integral part of their routine work life (Lawson, 1983). Compared to the others their expeditions have been described as more restricted, usually limited to internal fishing ports.

The information presented in this paper, forms part of a study on the changing characteristics of artisanal marine fisheries among the Ga-Adangbe. This phase of the study was funded by the F.A.O. Integrated Development of Artisanal Fisheries (IDAF) Project based in Benin. About 40 fishing compounds at Lanma, Jamestown, Nungua, Prampram, Kpone, and Old Ningo in the Greater Accra Region were studied by the author, using interview guides. Although most of the

respondents were men, some women who have accompanied migrant companies in the past took part in the study.

Fishermen's migrations can be studied within the tenets of migration theories in general, although it is a phenomenon which has largely been ignored in this field of study. Fishermen follow commonly accepted principles in migration studies that "human beings will tend to gravitate from places having fewer advantages (however they are defined) to those having more." (Zelinsky, n.d.:20). Several of the existing approaches to the study of migration are directly relevant for investigations in fishermen's migrations, since they highlight empirical (Lee, 1966), economic (Simmons et. al., 1977), sociological (Ritchey, 1976) and human-ecological (Sly and Tayman, 1977) factors of labour movements which continue to be key issues in migration.

The analysis of fishermen's migrations in this paper is dominated by exploratory empiricist observations about migration of fishermen among Ga-Adangbe traditional canoe fishermen. Limitations in the conceptual scope in the paper are directly related to the dearth of information on the subject. Subsequently, not much attention is paid to key assumptions in migration theory such as the basic notion that migrations of labour are basically in pursuit of equilibrium (Roland 1976:11).

2. BACKGROUND TO MIGRATIONS

As indicated earlier Ga-Adangbes do not have the same reputation in migration as the Fantis and Ewes (see Lawson, 1958), but there are claims that migration has been practiced for a long time among these people. Fishermen relate oral histories of migrations dating back to a hundred and fifty years in some of these communities. In addition, fishermen have their own classification of different types of migration. Further, years of migration have helped to establish regular ports of destination for Ga-Adangbe migrations. Changes that have taken place in the technology of canoe operations in general, have had profound effects on the size of migrating teams; distance travelled; the length of stay in host community and the general cost of migrations.

Many of the migrating fishermen are young men of about 20 years to 40 years. At the two extremes however there are some young boys who bail out water from the canoes (9 to 15 years), and some older men above 50 years. A 67 year-old man at Kpone said he continued to migrate until 1988. Some companies feel that it is important to have one older person among the crew to hold the position of "Lelenaa tse" (crew adviser). Such a person directs the crew and settles

disputes among them. For the young, these trips serve as apprenticeship training grounds for their future career as fishermen.

Nearly all the fishermen acknowledged that fishing was their main occupation. In addition some were engaged in farming as a supplementary activity. Very few of them had any education. Out of the 20 who were interviewed, four fishermen had completed middle school; one had finished technical school and one had some primary school education. The women who travelled with these companies are discussed in section 5.2 of this paper.

2.1 Early Migrations

Fishermen's migrations among the Ga-Adangbe were seasonal dominated by internal intra-regional trips in the past, both to the east and to the west as the following examples illustrate. The first fishing migrants from Prampram were said to have moved a mere 1 km from the main beach, where they set up a migrant community. From Lanma fishermen undertook short trips to Teshie, Nungua, Prampram and Tema. Migrants from Kpone previously migrated to Accra regularly, before they extended their trips to Axim in the Western Region. Nungua fishermen regularly migrated to Ada and the Volta Region for about 60 years, before the Volta estuary at Ada were disturbed by the creation of the Akosombo Dam. Fishermen of Old Ningo suggest that migration from this area may started in the early part of this century, to places like Senya Breku. Those who ventured far were inclined to stay away for long periods, and often established permanent migrant settlements such as the case of the Ada settlement at Lanma. These people who claim to have migrated from the farming village of Matsekope about 50 to 100 years ago, continue to visit their original home.

More distant inter-regional trips were undertaken to places like Axim in the Western Region of Ghana. Many of these trips eventually led to the establishment of permanent migrant communities. Fishermen from Kpone, Nungua were among the early migrants to Axim. They continue to operate in this area, but maintain their home links through frequent visits to their original villages and towns.

It is difficult to establish any specific patterns to the selection of the ports of destination among migrant fishermen. on the basis of the limited data that is available. One can speculate however that, fishermen are attracted to places where family or community members have already migrated; where they have developed business relations with host parties; and also where there are rumours of good fish stocks.

Long distance international migrations were however not completely absent in the past. Fishermen at Jamestown indicated that their forefathers were migrating to fishing villages in the Calabar area in Nigeria on fishing expeditions and as canoe carvers, by 1910. Such adventuring at the time was probable given the familiarity between these groups of people as a result of colonial transshipments of Africans, between different West African ports.

Early migrations were undertaken in small groups with crew sizes that were usually under ten men reflecting the simple technologies of the period. The trips were tedious because canoes had to be paddled all the way. There were very few sails in operation and out-board motors virtually non-existent until about the 1960s. The physical discomfort involved in undertaking these trips served to discourage migrations to far away places, and also made it difficult for fishermen who did go far afield to return to their hometowns on a frequent basis.

It is interesting at this point to note that, even where Ga-Adangbe fishermen had not been directly engaged in migration in the past, net owners from this ethnic group had been known to contract Anlo Ewe fishermen to undertake migrations on their behalf (Lawson, 1958). By recognizing and capitalizing on the expertise of the Anlo Ewes in this manner, they were able to benefit from this source of income.

2.2. Current Migrations

Present levels of migration along the Ga-Adangbe coast appear to be quite high. About 90% of fishermen that were visited in 20 compounds have migrated to other fishing ports inside and outside Ghana within the last ten years. The ratio of women involved in these trips have been about one woman to four men.

Others have confirmed that Ga-Adangbe fishermen are currently engaged in migrations alongside the Fantis and Anlo Ewes. They have been associated with some amount of eastwards migration to the Volta Region, and sometimes to Togo, and westwards to the Western and Central Regions (Koranteng and Nmashie, 1987). Within the region itself they also note that there is a high rate of intra regional migration (ibid). Haakonsen (1989) also acknowledges the presence of Ga-Adangbe fishermen on a seasonal basis in Benin, Nigeria, Cote d'Ivoire, and Togo.

In a few instances such as in the case of Equatorial Guinea, it is not clear whether Ga-Adangbe fishermen actually do operate in some of the countries that they claim to be visiting. Around the 1980s, important transformations

begun to take place in the terms under which some canoe fishermen migrate, which are not so obvious from simply studying the list of places visited below. In Gabon it has been observed that they go and work as contract labourers for Beninese and Gabonese net owners, rather than as crew members of traditional companies. At the moment, Gabonese net owners travel to Ghana when they are hard pressed for expert labour, to recruit fishermen from Accra to operate their canoes. New business relations are thus being formed which will eventually lead to significant changes in the relations between crew and their local canoe owners.

The figures below summarise the data on the present levels of migration in 20 compounds from all the towns and villages that were studied.

Number of fishermen in 20 compounds	= 187
Total number of fishermen who have migrated to fish elsewhere in 20 compounds in the last ten years	= 175(93%)
Total number of women who accompany crew in 20 compounds	= 43

Figure 1 below describes the current destinations of fishing migrations among the Ga-Adangbes.

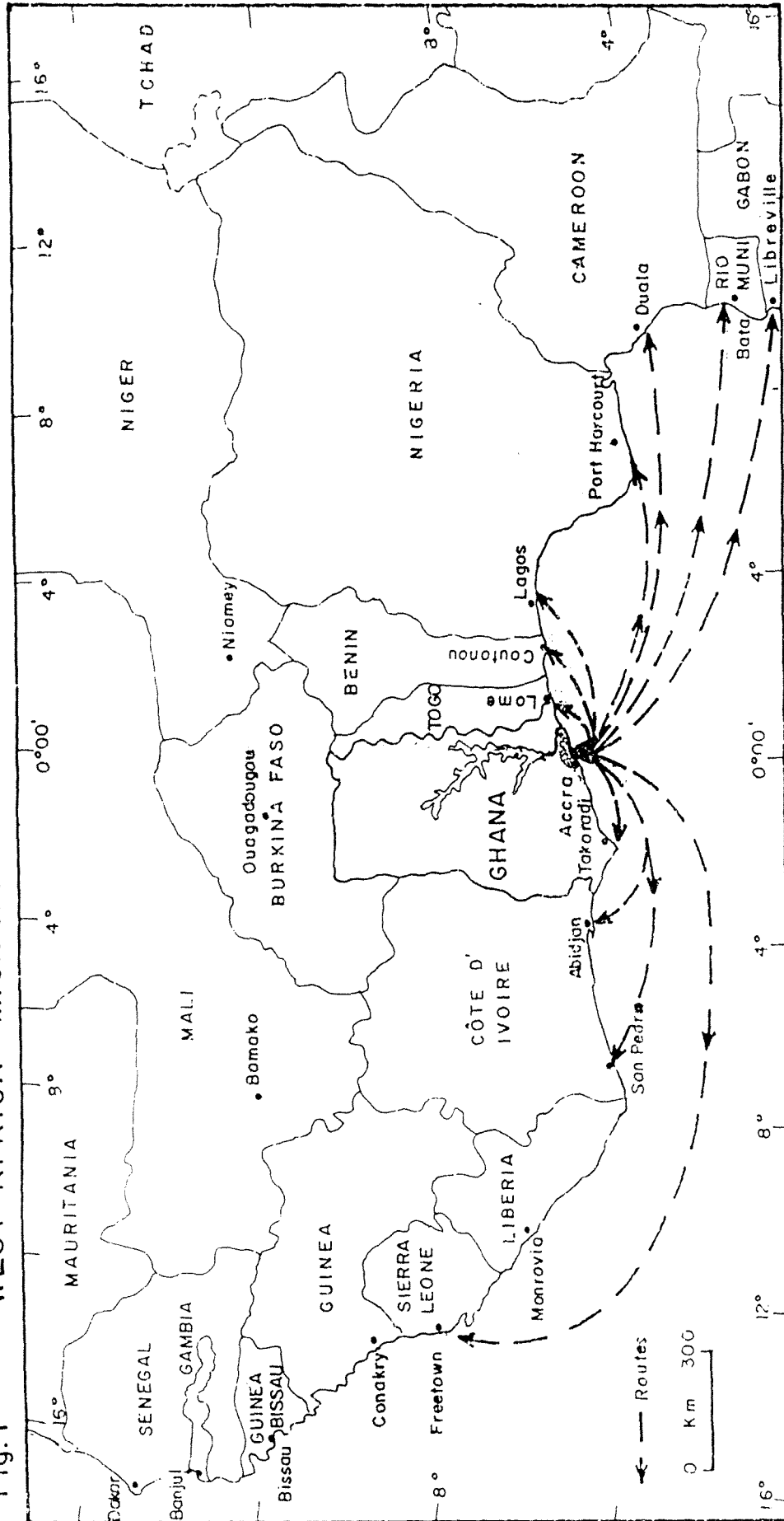
Places Visited by Fishermen According to Home Communities

Hometown	Local Destination	Foreign Destination
Kpone	-Axim -Elmina -Saltpond -Apam	-Cote d'Ivoire (Abidjan San Pedro) -Nigeria (Lagos Port Harcourt) -Togo (Lome)
Prampram	-Senya Breku -Apam	-Togo (Lome)
Old Ningo	-Winneba -Nyanyanu -Akosombo -Yeji -Apam -Tema	-Cote d'Ivoire (Abidjan) -Benin (Cotonu) -Togo (Lome) -Gabon
Nungua	-Tema	-Togo (Lome)

Source: Field survey, 1990.

Many of these destinations have already been noted by Haakonsen (1988).

Fig.1 WEST AFRICA : MIGRATORY ROUTES OF GA-ADANGBE FISHERMEN, 1990



Source: Field study among Go-Adangbe fishermen in Ghana, 1990

2.3 Types of Fishermen's Migrations

Social scientists have experienced considerable difficulty in their attempts to define and classify fishing migrations. Unresolved questions over the periods of movement, distance, and other patterns of behaviour that have frustrated attempts at formulating a universal typology of migrations are reproduced in the case of fishermen's migrations. Debates over the distinction between labour circulation (temporary changes in the distribution of population) and labour migration (permanent changes in the distribution of population) are worth considering (Gould and Prothero, 1935). In this case, however, the concept of migration is used in a broad unrestricted sense to include general kinds of population movements which may or may not be temporary.

Fishermen's movements away from their home base may be for very short periods of one month or less, or for periods of up to one year or longer (Azu, 1966).

Ga-Adangbes have evolved their own system of classification of migrations over the years, which helps them to distinguish between short periods of sojourn away from home and long periods spent at other fishing ports. The two most widely used categories of fishing migrations known include:

1. Aprodo (Aplodo)
2. Hefoo, Tsorgah

i) 'Aprodo'

Fishing Migrations among the Ga-Adangbe are popularly described as Aprodo or Aplodo. Most fishermen are unable to offer any meaning for the concept. Some suggest that the word was coined from two Ga-Adangbe words, namely "apro" which was a piece of lead beaten into a long plate. These were used as weights to sink the nets and "Dom" literally meaning 'to undertake a journey. Aprodo therefore is a corrupted form of the two words which mean 'apro is on the move'. However, the word may also simply be a corruption of the Fanti expression 'apo du' which means 'on the sea'.

Contrary to expectation, the idea of Aprodo does not entail any standard time frame. Fishermen from different communities attribute to Aprodo different periods of stay away from home. Many people describe aprodo as periods of 1 month to 5 years away from home. In other places like Lanma aprodo could extend into several years away from home. Fishermen here explain, for example that, they live in a permanent state of aprodo. Many people insist that periods of less than one year are not "proper aprodo."

ii) 'Hefoo', 'Tsorgah,' 'Dommo,' 'Kepoohe'

Fishermen tend to distinguish between 'aprodo proper' and other types of migrations of shorter duration. It is often explained that quite frequently fishermen make quick trips to places where heavy shoals of fish have been spotted. These are referred to as "Hefoo" (a quick dash there and back), (Ga), "Kepoohe" (Prampram), "Dommo" (Lanma), "Tsorgah" (Nungua).

'Hefoo' trips can be very short, 1 week trips. Many fishermen describe them as one to five-months trips, usually limited to one fishing season in a host country. Several 'hefoo' migrations can therefore be undertaken in one year. Due to modern technology 'hefoo' or 'aprodo proper' are less carefully planned than before. They can be undertaken as a result of a spontaneous decision taken even while at sea. Following this decision the crew land at the intended destination before sending a message by land to their families concerning their whereabouts.

It is worth noting that fishermen are more ready to classify migrations generally into long term, and medium term short-term, than by actual periods of stay. General comments that "fishermen are able to travel fast these days" also indicate that changes may have occurred in the conception of length of time previously regarded as "hefoo" or "aprodo". They extend "hefoo" trips into longer periods of stay away from home. Aprodo can be seasonal or permanent as in the case of Lanma. This is an Ada community that migrated from Matsekohe to the western north coast of the Greater Accra Region. The people still maintain strong ties with their original home. These changes have been made possible by the immense technological changes that have taken place in canoe fisheries, particularly the outboard motor.

A very interesting classification of migration which attributes a normative as well as numerical classification was given by a fisherman at Kpone. This is described below:

Classification of Migrations by Kpone Fishermen

- a) Short-term: The crew move to nearby fishing towns during certain peak but short periods, they get the fish and then return. Duration of stay is about 1 to 4 weeks. These are mostly internal migrations.
- b) Medium-term: Crews move over to new areas for a whole fishing season within the year. Duration of stay away is about 1 to 3 months usually in other countries.
- c) Long-term: Crews move over to new areas for a whole fishing year or more, in other countries. Sometimes they stay there and marry.

Other classifications of migration that are commonly used are the internal/international categories, and the intensive/extensive categories. These have been used to distinguish between the "nomadic" rather than "settled" migratory movements of Senegalese compared to Ghanaian fishermen (Diaw, 1983).

3. MOTIVES FOR MIGRATION

Fundamental ecological reasons underlie fishermen's migrations. Basically fishermen pursue fish stocks in other territorial waters in what has been described as regulated fishing migrations (Ibid). However, there are accompanying strong social and economic forces that compel fishermen to follow fish stocks to near and distant places. At present economic motives for migration appear to override most other considerations.

3.1 Ecological Considerations

It has been suggested that the Gulf of Guinea is one area of intermediate fish productivity "where less rich and less regular upwellings do take place between Cote d'Ivoire and Benin" (Diaw, 1983: p.20). Patterns of upwelling are described as typically seasonal in the West African Region, which causes fish migratory movements (ibid). The upwellings, are crucial for biological productivity, because they bring nutrient-rich cold waters to the surface which promote plant growth to support the multiplication of fish stocks. The richest and more stable upwellings in the West African region have been associated with the stretch of coast between Mauritania and Guinea in the North, and between Gabon and Angola in the South. In Ghana the major upwelling occurs from late June to early October when surface temperatures fall below 25 C. A minor upwelling occurs in January or February, when surface temperatures are less cool at 26-27 C (Mensah and Koranteng, 1988).

To some extent, migration patterns among fishermen therefore, may be linked to the seasonal behaviour of these upwellings. The intriguing observation however is that Ga-Adangbe fishermen do not necessarily move because of upwellings, but simply towards the next lucrative fishing village. This reinforces the view that migrations to other coastal areas are closely tied to subsistence needs. It is therefore difficult to separate migrations from the economic necessity to "produce" on a regular basis.

ii) Economic Reasons For Migration

The opportunity to obtain heavy catches and the ability to save money are two of the most commonly given explanations for migration among Ga-Adangbe fishermen. It is possible^v to achieve these objectives because fishermen are able to "concentrate on their work when they are away from home." But perhaps more important, they are saved from the daily financial obligations which plague them from immediate and extended families at home. As was expressed by a fisherman from Nungua, "you do not spend much money on unimportant things when you are away from home."

The fishermen have very interesting explanations for why they are able to do well in other places. Many believe that they have greater skill in fishing than their hosts, others suggest that their hosts have more resources than they can exploit on their own. Whatever the case, fishermen perceive a situation of relative advantage in the host communities. Abidjan for example is widely believed to be "very resourceful", and at Kpone, it was said that "fishermen go to places where fish is abundant but fishing is not their main job." These comments were made mainly in reference to Gabon, Equitorial Guinea, Cameroon, Togo and Cote d'Ivoire. Table 3 below that shows the impressive distribution of Ghanaian canoes in other countries lends support to some of these claims.

Table 2: The Presence of Ghanaian Canoes in Neighbouring Countries

Country	Total Canoes	% Ghanaian	Total Motorised Canoes	% Ghanaian
Togo (1983)	409	77%	311	80%
Cote d'Ivoire (1983)	754	66	400	95
Liberia (1986)	828	36	290	95
**Benin (1987)	213	39	170	40

Source: Haakonsen (ibid) :52.

* *Data refer to Cotonu Port only.

Admittedly Table 2 does not give any indication of the presence of Ga-Adangbes in the neighbouring countries. But the domination of Ghanaian canoes is evident in the total canoe population and some of these no doubt belong to Ga-Adangbe fishermen.

Monetary attractions of 'aprodo' and 'hefoo' also include the opportunity to earn convertible or "hard currency" (CFA) from the Francophone countries. Similarly, fishermen identify ready cash and minimal delays in payments by the fish agent (normally a woman) in the host country or internal port as a great incentive. This can best be understood in the light of the credit marketing arrangements that typically prevail between fishermen and female fishmongers in their home towns. Vercruijssse (op. cit.) has described how deferred payment for fish invariably works against fishermen, and binds them in a perpetual state of indebtedness to their customers.

3.3 Social Factors in the Migration of Fishermen

Beyond ecological and economic interests, fishermen may be attracted to migrations for socio-cultural or political reasons. During the times of oar-propelled canoes, migrations carried connotations of bravery and prowess. At a personal level, migrations were also seen as periods of reflection or meditation, to reorganise oneself. The period of stay away was frequently described as "hiding" away; avoiding "disturbances" or "distraction" from family and friends.

system agreed upon by the crew, and the financier of the trip. Such savings may be kept for long periods in the case of a prolonged "aprodo" (up to 5 years). Company crew have access to petty cash during the period of 'aprodo', either by selling small amounts of fish after every landing, or by borrowing against their earnings from the company leader.

Profit-sharing systems on migratory trips tend to be slightly more sophisticated than the systems normally practiced by Ga-Adangbe fishermen at home. Typically, deductions are made towards boarding and lodging expenses; loans borrowed to finance operations; and costs of operation borne by the crew. The rest of the money is divided equally between the net/canoe/motor on one hand, and the crew on the other. Some of these profit sharing systems are described below. Sharing system tend to vary with different types of gear, but it was not easy to identify any particular patterns during this short study.

1st Type - Deductions:

- for pocket money (sise shika)
- for ice
- fee for crates
- harbour duty or beach tax
- money for wives

Rest of money is shared 50:50 by (1) net/canoe/motor and (2) crew and canoe owner.

2nd Type - Accounts are rendered weekly:

- deductions are made for food, fuel, pocket money, bait
- net and canoe takes 50%; crew take the remaining 50%.

*This is common in line fishing.

3rd Type - After deductions are made for daily expenses, the money is shared as follows:

- | | |
|------------------|---------------|
| - Outboard motor | = 10 parts |
| - Canoe | = 2 parts |
| - Fishermen | - 1 part each |

Deductions are made after every landing for petrol, food and pocket money.

4th Type - Deductions are made for food, fuel, charcoal

- Fishing gear receives 50%
- Crew receives 50% but shared according to seniority. Captain receives two times the wages of an ordinary crew.
- The crew are allowed to sell small sharks (chaskele) as pocket money.

5th Type - Deductions are made for the daily upkeep of crew.

- Canoe	=	4 parts
- Net	=	7 parts
- Motor	=	7 parts
- Crew members	=	1 part each

In all of these the smaller the size of crew the more profitable the trip. The company keeps a clerk either from among them or from host community. All crew members names are recorded in a book, and their earnings (and debts) are marked against their names.

It is important to realise that even where it is not stated, the crew normally reserve a portion of their earnings for the women members of the company as 'payment' for their housekeeping services. This is further elaborated up in Section 5.2.

Marketing can occasionally be a problem for fishermen. Some of the fish that they are accustomed to catching in deep sea are not popular in host communities. Nigerian consumers in particular pose such problems as river fish are more popular than marine fish. There were general comments that many of the other countries do not engage in deep sea fishing as much as Ghanaians. The fish is sold in crates; by the bowl or singly if they are big.

4.3 Economic Transactions

Economic relations between the Ga-Adangbe companies and their host communities, especially in international migrations appear to be quite limited to fishing interests. Apart from their interaction with landlords, landladies and "fish mothers" or male auctioneers, the migrants do not report any other regular business contracts with their hosts. Outside the actual fishing operation a considerable amount of shopping takes place for spare parts and company members however shop for personal items before they depart for their permanent homes.

Seldom do migrants recruit local fishermen to join them on fishing expeditions. Occasionally men from the host's family are allowed to join the company, if there is any need for extra labour. They are not regarded as part of the company, but rather "hired labour." Such fishermen receive their share of the catch either in cash or kind, after every fishing trip. They normally earn less than members of the crew, but some companies give everybody the same share. Where ever possible, the companies try to recruit Ga-Adangbe

or other Ghanaian fishermen instead of the local people. At old Ningo, it was indicated that sometimes fishermen in the host community try to join simply to learn the art of Ga-Adangbe fishermen.

The economic arrangements for internal migrations are usually less sophisticated and not as expensive as has been described above. In many ways they are also less economically rewarding because the cedi is a weak currency.

Fishermen point out that it is not always profitable to undertake migrant trips both at home and abroad. There are times when the company is unable to catch enough fish to cover the overheads of the operation. A fisherman at Lanma explained how his company had returned from Abidjan empty-handed because of poor fishing excursions.

5. SOCIAL AND POLITICAL ARRANGEMENTS

The organization for migrant trips is in many respects not too different from the way fishing companies are organized in the home community. The canoe owner normally selects members of his company(ies) based on kinship and character. Some of the basic criteria that he or she applies in the selection includes competence at fishing; hard work; knowledge of net repair and other minor repairs; and good health. Companies may range from very small to very large (6 to 23 persons), depending on the fishing gear used on the trip. Canoe owners normally do not join the crew, but delegate one of the 'leaders' to act on their behalf. Although the companies depend very much on team work, this is backed by a strictly observed authority structure. Most companies include about 8 positions as follows:

- 1) Lelenaa tse
- 2) Bosun
- 3) Assistant Bosun
- 4) Motorman/engineer
- 5) Paddleman (paado morlor)
- 6) Crew members
- 7) Sometimes accounts clerk
- 8) Apprentices

The Bosun is responsible for making adequate arrangements both at home and abroad for the welfare of the crew and their wives ahead of the trip. Sometimes apart from the Bosun, the company includes an elderly man (wortse) who oversees the smooth running of the company. He has the option of joining fishing trips. The Bosun tends to operate through the same contact man or woman from year to year. This person makes arrangement for accommodation either by renting rooms or obtaining a site for them to erect

temporary shelter (aluminium, wood or palm fronds). It is easier to hire a house on internal migrations rather than on international migration.

The contact person has to introduce the company to the chief fisherman of the host community. This is an important contact since this person is responsible for ensuring the safety of migrants and seeking their welfare in other ways. The company is expected to show recognition and gratitude through gifts after every landing. It is not clear whether all companies fulfil this obligation. This is often described as beach tax paid to the host chief fisherman.

In some cases such as in Ivory Coast, there is a sizeable Ga community which is able to provide initial assistance to the migrant company. The chief of the Gas in this situation acts as the main contact person. He selects an agent or "loonye" and allocates land for shelter for the company. He also authorises the agent to give loans to the company whenever necessary.

It is important to point out that not all migrations are as carefully planned as has been described above. The increased speed of travel these days has made it possible for fishermen to take quick and spontaneous decisions about their movements. It was pointed out at Jamestown that, now "aprodo may be undertaken even without prior information. Decision to land somewhere else and stay there for some time can be taken at sea and information brought home later."

5.1 Immigration and Migration

Migrant fishermen have gradually moved away from their past tradition of travelling without the necessary immigration papers. All the fishermen that took part in this study in all the towns and villages remarked that they now passed through the necessary formalities, usually upon arrival at their destinations. Very rarely do fishermen leave the country with adequate arrangements for immigration papers. They do stress however that, it is important to regularise your stay, especially for prolonged "aprodos."

The agents or contacts in the host community are a very crucial channel for processing papers. Very often the safety of fishermen in terms of their relations with authorities depends on the "efficiency" of their agent. Unless fishermen want to go outside the fishing communities they are quite safe to operate without immigration papers within the fishing communities. Their safety is however, quickly jeopardised by internal as well as inter-regional conflicts which flare up in their host countries. Past expulsions of Ghanaians from Nigeria, Sierra Leone and the

recent civil war in Liberia have brought several fishermen back after long periods away from home.

In a few cases fishermen, seek the assistance of the Ghana Embassy/High Commission to arrange for passports or/and I.D. cards. Sometimes the company is covered by a single entry document. Some of the entry papers needed by the fishermen include Passport/Travelling Permit/Card du Travail, Card de Residence. The "chiefs" of the migrant Ghanaian or Ga-Adangbe Communities often liaise with the embassies to protect fishermen through official channels.

Within the host community itself, fishermen are expected to fulfil certain conditions in order to be granted permission to stay. These include an agreement to participate in communal labour, and the payment of tax to the local chief or chief fisherman. The amounts may differ considerably from 5000 CFA to 20,000 CFA per company to cover the period of stay. Normally the fishermen are expected to abide by the bye-laws of the community. Popular among these are a ban on fighting, stealing, wife beating. Although women are not considered as direct partners in 'aprodo,' they make a very critical contribution to most expeditions. Sometimes there may be as many women in the company as men.

5.2. Women and Migrations of Ga-Adangbe Fishermen

One of the most important facts about Ga-Adangbe fishermen's migration is the alternative marketing arrangements that opportunity affords, brought about by the change in trading partners from wives and female relatives to 'fish mothers' (loonye) in the host community. This may partly explain the better prices that fishermen claim they obtain in host communities, both internally and internationally. In addition, the lack of kinship relations with the fish mothers in host communities presumably makes it easier for fishermen to bargain for ready cash payments rather than deferred payments. Female relatives have to confront the monopolistic control of the market by fish mothers (loonye) in the host community. It is worth noting that with time fish mothers tend to apply some of the same strategies that lead to unequal terms of trade between the two parties in favour of the women.

The migrants' wives and female relatives however, are not completely cut-off from the more lucrative markets abroad. Although they are deprived of active marketing, their role of housekeeping makes them relatively indispensable to most companies. Women are therefore invited along as housekeepers with clearly specified terms of payment. It was reported by one company leader at

Prampram that the fish is usually divided between the wives accompanying their husbands and the fish mother.

Most companies travel with one or two women while other companies allow every crew member to bring his wife along. Where only a few women are taken, they are usually the wives of the leaders. The Bosun's wife for example, is always given priority. In the case of multiple wives of a polygamous fisherman, the most senior wife normally goes first. If the migration is for a long period each wife takes a turn until the men return. Women travel by road to meet their companies at the host community.

The women are usually paid a part of their husband's share when there are several of them. In other cases they are allowed to sell one crate or other unit of fish each at every landing, based upon the consent of the fish mother. Their main responsibilities on these trips include cooking, washing and performing other house care duties for the men. The Table below gives an indication of the rate at which women accompany men on migrations in the towns and villages that were studied.

Table 3: Incidence of Women Accompanying Fishermen on Migration Among the Ga-Adangbe (20 Compounds)

	Yes	No
Internal	16	4
International	20	0

Source: Fieldwork, 1990.

The canoe owners are keen to recruit unmarried young men for the migrations, because it naturally helps to reduce overheads to a relatively low level. But companies who travel without any women to keep house often face the potential of "marrying" local women if they stay for long periods of time, thereby incurring the same costs as they would have done if they had been accompanied by women from home. Sometimes unmarried men take their oldest working sisters along to look after them. Men are least likely to take their wives on the longer trips such as Nigeria, Gabon, Equitorial Guinea.

Apart from the allowances that they get from the crew, women who go on 'aprodo' are also allowed to sell cooked food for extra income in their spare time.

Authority structures naturally develop among the women, based on the status of their husbands in the company. If the canoe owner's wife is travelling with the team she

automatically becomes the women's leader. This person tries to maintain good relations among all the women. She also ensures that conflicts do not erupt between different wives. Occasionally a wife may refuse to return to her hometown to allow a junior wife to join their mutual husband. Such women may continue to stay on their own upon a promise that they will not interfere in their husband's life with his other wife.

6. TECHNOLOGY AND MIGRATION

Ga-Adangbe fishermen have traditionally been associated with line fishing, but they have also followed the Fantis in the use of Poli and Ali, motorised canoes (Haakonsen, op. cit.). Companies select their fishing gear based on the type of fishing they anticipate in the host community. The choice of technology that is taken is also affected by the logistics of the trip. Some canoe owners prefer to use smaller crafts than the 45'-48' foot poli canoe, because the latter is very expensive to sponsor. Nevertheless the Poli is popular on migrations.

An important issue in fisheries migrations is the extent to which technology transfer (both ways) occur as a result of migrations. Fishermen acknowledged that many of their technologies and methods of fishing were not popular in the host communities. This was less true of the internal migrations than the international migrations. In the former situation, they were not sure how much of their technology was adopted by their hosts, although a few people acknowledged that "sometimes they come out and watch us, occasionally they ask us to teach them our technique."

Deep sea line fishing popularly known as "awam sea" for example, seemed to be peculiar to the migrants wherever they practiced this method, in this case - Port Harcourt and Lagos in Nigeria, and Cote d'Ivoire.

In many of the host communities river fishing using cast nets is widespread among the local fishermen. In Nigeria there appears to be little interest among local fishermen and vice versa to adopt the other's technology.

In Cote d'Ivoire on the other hand, some local fishermen have apparently adopted line fishing, learned from their Ghanaian visitors. But some differences have developed between the two practices. The Ivorians are said to spend shorter periods at sea, and they typically stay close to the shore, a habit from a period when fish was abundant and close to the shore. The Ga-Adangbe migrants on the other hand stay out longer (up to 6 days) and explore other ports during this period, including Cape Palmas, (Liberian waters), Axim, San Pedro. Table 4 below describes

the types of technology that are used by migrants on their trips and their periods of stay away from home..

Table 4: Technologies Associated with
Ga-Adangbe Migrants

Places Visited	Migrant Tech.	Period of Stay	Migrant Purchases	Migrant Sales
<u>INTERNATIONAL</u>				
Benin (Cotonu)	Drift Gill Net (Anifa Anifa), motor, poli line	7 mths to 5yrs	nets	canoes
Eq. Guinea	watsa, motor	8 mths to 1 yr	net (for repairs)	canoes
Nigeria (Lagos, Pt.Harcourt)	Drift Gill Net, line, watsa, motor	2 yrs	motors & nets	canoes
Cameroon	Watsa, motor	4 to 7 mths	nets	canoes
Cote d' Ivoire (Abidjan, S. Pedro)	Line (Awam sea), Poli	1 mth to 4 yrs	hook & lines	old canoes (to Ghanaians)
Togo (Lome)	Poli, motor, Watsa, Line	3 1/2 to 6mths	Nets	canoes
Gabon	Poli & motor Watsa	8 mths to 1 yr	Nets	canoes
<u>INTERNAL</u>				
Ada	set net & sail (toga, tenga)	4 mths	nil	nil
Nyanyano	poli & motor	1 mth	nil	nil
Axim	Watsa, Line	1 mth	nil	nil

Apam	Watsa & motor	Several years	nil	nil
Senya Breku	Watsa	1 mth	nil	nil
Winneba	Watsa	1 mth	nil	nil

It has also been observed that as the fish stock has moved further out to sea, host fishermen have practically abandoned "awam sea" fishing for river fishing. Ghanaian fishermen are responsible for a great part of the marine canoe landings in Cote d'Ivoire (ibid.). The Drift Gill Net came to be known as 'Anifa anifa', as its introduction in Ghana around the mid-seventies may have co-incided with the change over to right hand (anifa) drive in the country. Awam sea or lagasse fishing are used to describe line fishing that extends over three or more days. In such instances fishermen carry ice to store their fish.

7. OUTCOMES OF MIGRATIONS

As mentioned earlier, migration is basically an integral aspect of fishing, because fishermen are inclined to pursue migration stocks of fish. Beyond this however, fishermen anticipate economic rewards, and indirectly social benefits from migrations. There are also accounts of difficulties and debts incurred on trips which cause considerable hardship to the companies.

7.1. Benefits of Migration

Successful international migrations carry a lot of benefits to the company. All crew members and the women are able to save money for investments in various costly projects at home, such as housing and livestock. Some spend against their earnings in the host country to purchase electrical appliances, clothes and household utensils. -New fishing gear, including nets, outboard motors are also purchased regularly on these trips. They are said to be cheaper and more available in the neighbouring countries. The companies occasionally sell their canoes and return home by land. There are no indications that canoes are purchased in neighbouring countries, but the savings from these trips may finance a new canoe at home.

Internal migrations are said to be less profitable, although they help the fishermen to maintain their subsistence levels. Some admit that they make some savings on these trips, though not as much as during international migrations. Underlying this of course is the lower value of

the cedi compared to the CFA or Naira in neighbouring countries visited by the fishermen.

Socially, the migrants also gain status on account of their broader knowledge of the "world." They may also be able to acquire new status such as marriage from the savings made abroad. Fishermen indicate that they bring home new songs, dances and even styles of clothing when they return, thus setting them apart from the others. This indirectly points to a certain degree of light social interaction between the migrants and their hosts, which is not readily recounted in conversation. Table 4 below describes some of the typical benefits accruing to fishermen and their families as a result of migrations. The Table comprises of multiple answers.

Table 5: Benefits From Internal and International Migrations Enjoyed By Ga-Adangbe Fishermen (1990)

Type of Benefit	Internal %	International %
1. Better work organization	40%	55%
2. Making of savings	65%	70%
3. To take advantage of bumper catches in host community	60%	60%
4. Regular parcels of money, provisions and other personal effects sent home	30%	80%
5. Availability of credit facilities in host communities	10%	30%
6. Cheaper prices of fishing inputs at host locations	-	10%
7. Acquisition of fishing inputs not available in home country	-	5%
8. Advantage of better fishing grounds or ports at host locations	50%	20%
9. Investment of migrant fishermen's money brought		

home for safekeeping	-	10%
10. Foreign currency	-	10%
11. None	5%	10%

Source: Field Study of Ga-Adangbe Fishermen, 1990.

7.2. Difficulties of Migrations

In spite of the apparent benefits that fishermen enjoy on their migrations, they also report some extreme hardships. These may be brought about by poor boarding and lodging, irregular entry preparations and misunderstandings with their "fish mothers." More fundamental difficulties such as a low fishing season also arise, which can lead to a complete disaster for the company. Table 6 describes some of the major difficulties and sufferings that could befall migrating fishermen in the town and villages that were studied.

Table 6: Difficulties Experienced on Internal and International Migrations Among Ga-Adangbe Fishermen

Type of Difficulty	Internal %	International %
1. Poor fish season	55%	40%
2. Breakdown of equipment	10%	
3. Conflicts with local folks	5%	
4. Heavy taxation	10%	5%
5. Problems of Accommodation		5%
6. Cheating and exploitative tendencies of host	5%	25%
7. Language barrier		15%
8. Long absence from family		10%
9. Frequent police harassment		25%
10. Difficulty of transporting items bought in host locality, home		15%
11. Lack of communication		10%
12. Lack of harbour facilities	5%	
13. Currency differences		10%
14. Events of sickness or death	5%	25%

Source: Field Study of Ga-Adangbe Fishermen, 1990.

The rather high percentage of fishermen who identified 'a poor fishing season' as a major difficulty in Table 6,

underscores the precarious nature of fishing, and the fact that fishermen are inclined to see it as a chance operation both at home and abroad. In a typical example, a company from Prampram that went to Lome in 1983 ran into considerable debt which continues to discourage migrations to Lome from Prampram. The company borrowed CFA 120,000.00 from their fish mother to buy a net and were unable to pay until they returned home with a promise to pay as soon as possible. The fish mother followed them to Ghana and reported the matter to some senior officials who ordered the fishermen to pay the amount plus interest totalling about C1,180,000.00 over a period of two years. The fishermen were financially ruined by the debt.

8. CONCLUSION

Although not associated with an extensive tradition of migration, Ga-Adangbe fishermen nevertheless have been involved in both internal and external migrations for a long time. This paper falls short of estimating the Ga-Adangbe components of Ghanaian migrant communities. Methods which have been used elsewhere to estimate the probable size of migrant populations, such as the difference between pre-arrival and post-arrival populations (Diaw, 1983), may not be appropriate here since it does not distinguish between the ethnic origins of migrants. Such information can best be collected from a form of ethnic enumeration of migrants at some of the ports of call.

There are indications that Ga-Adangbe fishermen have increased their participation in international migrations over the years, while internal migration especially at the intra-regional level may have reduced. For example Ada which was once an active receiving community no longer attracts migrant fishermen. One fisherman from Kpone commented that there were very few international migrations during his childhood in the 1940s, yet Kpone today is one of the most active ports of international migration in the Ga-Adangbe fishing area.

The increase in this type of migration raises several questions about agreements on free movement of nationals within the region; the impact of migrant fishermen on fishing activities of neighbouring countries; and the safety of migrants in foreign countries in cases of both internal and international conflicts. The very recent departure of Ghanaian fishermen fleeing the war in Liberia is a clear example of the difficulties that can arise in such movements, especially in the case of permanent migrants.

The paper also points out the active role that women play in migrations on the whole. It is interesting to note how they are able to negotiate for direct economic reward

from the crew members, while performing duties which they are expected to give freely in a marital union, the ticket upon which the majority of women are able to accompany the crew on migrations.

Much of the evidence also goes to support the view that migrations are primarily economically motivated, although the social pay-offs cannot be under-estimated. Fishermen generally see migrations as the opportunity to concentrate on their work, and to save money towards capital investments. In this regard the canoe owner and the crew members share a common interest which promotes hard work while the company is away.

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THE ANLO-EWE FISHERMEN'S MIGRATIONS

BY

G.K. NUKUNYA.

The Anlo whose home is the country surrounding the Keta, Avu and Angaw Lagoons east of the Volta estuary, are the most numerous and today the best known of the Ewe-speaking peoples who now live in south-eastern Ghana, southern Togo and the south western coast of Benin Republic. Oral traditions, identifiable locations and historical records suggest that the Ewe had lived in or around Ketu near the present Benin-Nigeria border in Yoruba country and later at Notsie (Nuatja) in central Togo before settling in different groups in their present country around the later part of the 17th century.

Today the Ewe speak one language with slight local variations, and share the consciousness of being one people, although they never lived under a single political authority since arrival. While forming a broad cultural group, however, differences exist in their social and political institutions making generalisations quite misleading (Nukunya, 1969: 1-2). Their political entities for instance range in size from small federations of a few villages whose total populations barely exceed two thousand inhabitants to those like Anlo with numerous large settlements. In 1984 for instance the Districts constituting Anlo returned a total population of 337,477 (Central Bureau of Statistics, 1984: 68). Economic activities also vary widely. While the coastal and riverine people combine fishing with some limited cultivation, the inland dwellers are noted cultivators of commercial crops like cocoa, oil palm and maize as well as root crops including cassava and cocoyams.

It is also to be mentioned that due to the general poverty of their soils, the Ewe are very much given to migration, both permanent and seasonal, resulting in large colonies of Ewe migrants in many neighbouring countries and also in non-Ewe speaking areas of their countries of origin. For instance the 1948 census of the Gold Coast (Ghana) indicated clearly that the Ewe were gradually moving west from their home areas, that there was a general migration from their places of origin towards locations to the west. This observation however ignored the large colonies of Ewe migrants on the coasts of Benin Republic and western Nigeria. Indeed Ewe migration is on such a massive scale that some estimates put their numbers outside Ewe country as exceeding those inside. This will put the total Ewe population at well over four million (Nukunya 1988 (a):68).

Of the migrant Ewe populations, the best known and the most easily identifiable are the Anlo fishermen operating across the entire West African coast (from Cape Verde to Lobito Bay). Others

are found in the many inland fishing settlements throughout the region as far as Mopti in Mali. They have therefore richly deserved the accolade of "Pan African Fishermen" given to them by Polly Hill nearly thirty years ago (Hill 1963-64: 1455).

Available evidence suggests that maritime fishing along the Anlo coast started in the middle of the 19th century and that it owed its origin to European presence (Nukunya 1987: 10-11). The principal net with which the industry started, the seine, still the main form in practice, is called yevudor or "the whiteman's net" though the dug-out canoes used to operate it have always been obtained from the neighbouring inland forest areas.

From all accounts the industry remained a local affair until the end of the 1st World War. Badagri in western Nigeria was the first attraction, with the mass exodus to its vicinity reaching a peak in 1925-26 (Nukunya 1987:20). Migrations to Abidjan followed several years later. Since then other centres have emerged including Tabou in the Ivory Coast, Monrovia, Liberia, Freetown in Sierra Leone, Seme, just east of Cotonou and Grand Popo, both in Benin Republic. These represent the major areas outside Ghana although as mentioned earlier, scattered colonies could be found further afield. It is also to be mentioned that in western Nigeria, Badagri is the centre usually referred to only because it happened to be the first place of call for the settlers. In actual fact numerous flourishing Anlo Fishing hamlets could be found between the Benin-Nigeria border and Lagos. In Ghana itself the important centres are, starting from the east Ningo, Accra (Chorkor), Senya Beraku, Winneba, Mumford, Cape Coast, Shama and Half-Assini. Within the Anlo area too, there is internal movement with Amutinu and Agorko in the north east and Dzita and Srogbe in the south west as some of the important centres for groups from the large settlements like Tegbi, Woe and Keta (Abutiakofe).

The pattern of migration involving Anlo maritime fishermen therefore reveals three main directions. First is the internal movement along the Anlo coast itself. Then comes the migration to Ghanaian coastal areas outside Anlo and finally the international expeditions to neighbouring countries and more distant places.

In its popular form Anlo maritime fisheries are organized in companies owned by individuals and families. Important requirements for establishing a company are the fishing gear, that is the seine (comprising the net, ropes, floats and weights), the operating canoe, and the cash to assemble the crew. The net in question ranges from the small ones measuring about 20 to 30 feet wide and about 300 ft or more long and the giant ones of about 80 feet wide and over 2500 feet long. The former are mainly for local use while the latter are those which feature in the migratory expeditions. For the special horse mackerel (caranx hippos) or afafa fishing locally however the

nets, afafador (afafa net), have always been big, closely resembling the large ones just described. It is even suggested that the present large nets are actually modelled on those originally used for the afafa fishing. The only difference between the old and the new nets is that the former were made of cotton threads while the latter are the nylon which makes them stronger. It is also advisable for a company to have one or two small nets as supplements to the big one especially for use during the off season to feed the company. In addition there is the boat which is the dug-out type reinforced with sawn timber at the top sides which measures about thirty to forty feet long, up to 5½ feet wide and deep enough to comfortably take in the nets and a crew of thirteen. The principal officers of a company are the business manager or the bosun as the Anlo themselves call him; his assistance; the secretary/financial secretary and the treasurer.

To get the essential equipment to start business both locally and otherwise therefore requires something like the following: boat including transportation from the forest ₦1,000,000; net and ropes ₦1,500,000. "In addition one needs initial mending instruments and threads which may also cost up to ₦100,000. Altogether, therefore, one needs an initial outlay of something close to ₦3,000,000 which according to the present exchange rate of ₦360 to one US Dollar will amount to just below \$8,500" (Nukunya, 1989: 160). For the migratory ventures more items of expenditure are required including transportation of both the fishing gear and the men as well as their dependants and their families. The company owner, in addition, has to provide advances for his men to the current tune of between ₦10,000 and ₦50,000 each, that is for about thirty men. For international expeditions, customs duties, cross-border bribes and extortions should also be considered. Clearly transportation costs would vary according to distance and whether or not international boundaries have to be crossed. For trips to Ghanaian spots distance alone matters, but for the more daring expeditions to Ivory Coast, Liberia, Sierra Leone and still further afield, much more than transportation costs is involved. "Thus, apart from the initial expenses on equipment of up to ₦3,000,000 or \$8,500, an expedition to Freetown, Congo or Gabon will require an extra capital of about ₦2,500,000 or about \$7,000, making a total outlay on equipment and the trip of about \$15,000. Equivalent figures for the Ghanaian centres may range between \$10,000 and \$12,000" (Nukunya, 1989: 160).

The national income levels within which these amounts have to be raised locally can be imagined when it is realised that gross annual salaries and allowances of top civil servants amount to just about \$2000. Given this environment it is of great significance to note that most company owners or dotowo (sing.dotow) as they are called in the local language are rural and mostly illiterate people. A closer study reveals however that

these entrepreneurs are mostly the descendants of earlier company owners while others are those who make it in other professions including commerce and public service and turn to fishing because of its lucrative prospects (Nukunya 1989:161).

From the above description the company owners would appear financially self-sufficient, but this is not always the case. Both during the preparations for the expeditions and in the midst of the contract period it sometimes becomes necessary to seek financial assistance or support. But the banks are not often of much help because of certain difficulties and constraints. As illiterates the company owners do not feel very much at ease with the banks whose operations involve paper work. Also since they operate far away from home, they are unable to get acquainted with the financial institutions in their home areas or command the confidence of those in their places of temporary domicile. In view of this local money lenders, relations and friends are those on whom the fishermen (the company owners) depend in the time of need. These are however inadequate due to high interest rates and non-availability of sufficient funds to meet the incessant demands (Nukunya 1978: 171-74).

Given the heavy financial involvement the need for a successful operation is quite evident if losses are to be avoided. The doto must earn enough returns to cover his expenses and at the same time satisfy his crew, not only to stay with him throughout the tour, but also enable him get men for future trips. Here the important considerations are his leadership qualities and those of his principal officers, the sharing system he follows and how he treats his crew and their families. As far as the sharing is concerned the popular procedure is to divide the net income into three with two going to the crew and one to the doto. The principal officers of the group such as the bosun, his assistance, secretary and treasurer get additional allowances.

In order to determine the reasons behind the need for fishermen to migrate, it is important to get some idea about the geography of Anlo country. The Anlo coast which is sandwiched between the sea and the lagoon is for the most part so narrow that it hardly exceeds one mile in width at its widest portions. Yet it contains many large settlements which lie in a continuous stream like beads along a string giving a population density of well over a thousand to the square mile. This compares with a figure of 370 per square mile for the entire Anlo area (Nukunya 1988(b): 3). Given such conditions the Anlo of the coast have very little room for manoeuvre. They are forced to utilize the sea and the lagoons to the full. The shallot industry in Anloga and other towns which depends on a very intensive cultivation is one other reaction, as is the poultry industry for which the area has been noted for centuries (Winnet 1850, Grove 1966, Grove and Johansen 1968: 1407). Fishing is therefore the surest means of

sustenance for a large percentage of the inhabitants especially in places outside the shallot growing area. However, since the beginning of the 20th century the Anlo coast had appeared overfished making it imperative for the fishermen to seek comfort in richer waters elsewhere.

For both company owners and members of the crew the decision to migrate has to be taken in relation to conditions at home. This is so because though over-population requires that emigration is a must for some inhabitants, not every one is under the same degree of pressure to do so. As already mentioned, not everyone is necessarily a fisherman. Alternative occupations exist. Moreover not all fishermen follow this occupation on full-time basis. Even for full-timers there are those who combine maritime fishing with lagoon fishing since the former though financially more rewarding is a seasonal occupation with periods of weeks, if not months, sometimes separating one major season from the other. Thus it is usually the full-time maritime fishermen who are usually involved in emigration. Others join the migratory expeditions with the sole aim of raising funds to form their own companies or start other business ventures or for other purposes such as building a house. A man with such a specific reason or aim may not go on more than one or two expeditions. Given these considerations, while it will be expected that the migrant fisherman is one who has no chance of any alternative occupation locally, the prospect of returning home with a lump sum of money for a definite project is a consideration which influences many other people (cf. Jorion 1988: 152-53).

Company owners have different factors to consider. The aim of every ambitious maritime fisherman is to form a company which will place a large number of men and their families under him. If he succeeds in his ambition, he is also well placed to make money, marry many wives and establish himself as a respectable member of the community. However, owning a fishing gear and forming a company is one thing, going on an expedition away from home is quite another. Many will agree, though, that only lack of funds may prevent a doto from making at least a few trips even if he does not want to make migratory expeditions his permanent modus operandi.

Of all the major aspects of their operations, transportation is perhaps the most intriguing and clearly the most hazardous. For travels to Ghanaian centres, both the crew and their families together with the fishing gear are transported by road. It is also quite common for some selected members of the crew to paddle or sail the canoe to their destinations. These days outboard motors are used for the purpose. For the international travels however the gear and other equipments and items are transported along the coast in the operating boat while the men and their families are taken by road. Border crossings are usually both time-consuming and quite painful not necessarily because of

governmental policies but rather because security, customs and immigration officials exploit the ignorance and illiterate status of the men to extort monies and goods from them. This is particularly the case during the return journeys when their chartered lorries are loaded with clothes, provisions and other valuables. All the border points without exception have been mentioned in this regard. Another problem of much concern stems from the frequent border closures which often leave the fishermen stranded at unscheduled points.

An expedition normally lasts eighteen months with an interval of about three months. These days however it is quite common to extend the contract to cover double this period due to the fact that the seasons are no longer considered reliable enough to enable a company to achieve much within the normal time. An important point to note in this regard is that a contract period does not mean a time of continuous fishing. as an offshore operation all activities are determined and regulated by the seasons and favourable atmospheric conditions. As such weeks or months may pass without any substantial landings. This is the doto's nightmare because whatever the position the feeding and the general support of the company must continue. He must always have the funds to meet any eventuality.

While in their places of operation the companies live in shanty structures constructed by funds provided by the company owner. Provision of substantial funding for these houses however is only required for new companies or fresh crew. Most of these shanty settlements have become permanent homes and the fact that not every member of the crew makes the subsequent tours ensures that vacant rooms or houses are always available in the old established hamlets however, repairs are always taking place. All these investments by the company owner, it must be stressed, go into the expenses which have to be deducted from the proceeds before the net profit is shared in the manner described. It is also to be mentioned that prior agreements with local chiefs and landowners are required for settlement and involve the payment of tributes in the form of drinks, fish and money. Though the amounts mentioned vary from place to place, they are generally considered high, but not too much to deter a company from settling at a place of its choice.

Feeding of the company as already mentioned is also the responsibility of the doto. Though he is expected to reclaim the amount from company funds the provision of the funds for this purpose often places severe strains of his resources. On their part many of the crew find the company ration rather inadequate and have to supplement it in various ways including borrowing, again from the doto. The fear that borrowing to supplement the ration may reach such proportions as to completely deplete the individual's share at the end of the contract forces some people to get supplementary means of sustenance. It is the reason many

give for taking their families along so that the economic activities of their wives including fish curing can sustain them and thereby enable them to avoid additional dependence on the doto. A crew member with his family around also has the comfort of eating food prepared in his own home rather than hiring or depending on a cook, usually a relative or wife of a company member.

Any exercise aimed at counting the number of Anlo companies operating outside their native shores will be extremely difficult since it will involve visiting all the centres of the industry throughout West Africa. It is however possible to arrive at some rough estimates based on figures collected from settlements of emigration. A recent study by the author (in 1989) revealed that the major areas of concentration now are shama in western Ghana, Abidjan in Ivory Coast and the western shores of Nigeria with smaller numbers scattered in the other centres. Woe, one of the principal homes of the emigrants has eleven companies in Abidjan, six in Half Assini, and about twenty in Nigeria. Other numbering up to five in each centre are found in such places as Cape Coast, Winneba, Mumford and Accra (Chorkor). On the basis of this rough calculation, this town alone should have no less than thirty companies operating outside its shores. If it is remembered that there are about twenty large settlements along the Anlo coast with strong fishing traditions and that the figures from as many as ten are likely to match, if not exceed, those of Woe, then we must be getting to the neighbourhood of five hundred. This figure incidentally compares favourably with that of those operating locally in 1986 when 466 canoes were counted between Atiteti and Blekusu (Jorion 1988: 135) though earlier counts produced higher figures (Grove 1966: 405). It is also to be mentioned that we are here counting only the beach seine companies and not the large ocean-going vessels or trawlers or the smaller companies such as the gill-net fishermen.

A company's operations are organized in such a way that the landings are sold only to women associated with the group. These are the wives of the doto and of the crew, together with female relatives of the owner and those of the principal company members. Women who provide financial assistance to the company or serve as cooks to the members also have access. The sales are usually on credit and at reasonable prices to ensure adequate margin of profit to the women. Payments are made regularly after each round of activities of a few days or weeks when accounts are rendered of the catch, expenses and financial returns. The usual method of curing is smoking though where the catch exceeds the capacity of the ovens, some are dried. Some frying is also done. In Ghana the activities of these companies greatly supplement local needs and those of the country at large. Important markets are, apart from the centres of operation, Accra, Kumasi, Takoradi, Tamale and Bolgatanga. Outside Ghana, particularly in the Ivory Coast, Liberia, Sierra Leone and Western Nigeria where

the indigenous people hardly engage in maritime fishing, the local industry is completely dominated by the migrant fishermen of whom the Anlo, the Fanti and the Ga-Adangbe are the most prominent.

An expedition's success or failure is measured in terms of the size of the individual shares at the end of the contract. Naturally the end results are never the same either for the different companies or for the seasons or contract periods. This year for instance the gross individual shares of the crew for two companies returning from Abidjan amounted to an average of C300,000 or just about \$850. This was considered by many to be rather small for a three-year contract. This is particularly so when it is realised that it is from this amount that expenses like monies borrowed have to be deducted. In the event, some crew members ended up with less than C100,000 net. The consolation however is that within the period he and in some cases his family have been fed at company expense. He also at the end of the contract gets a share of the cloth which the company provides for all members of the crew.

One way of assessing the income of the migrant fisherman is to compare it to that of his counterpart who stays at home. Clearly the activities of the latter are carried out in more comfortable conditions whether we are concerned with the maritime or lagoon fisherman or the shallot farmer. For one thing they live among their families and work in a more relaxed atmosphere, though unlike the migrant, they have to fend for themselves. However, the local worker's situation would have to be considered against the background of the precarious physical and climatic conditions which adversely affect economic activities from year to year. Both lagoon fisheries and shallot farms are extremely vulnerable to the vagaries of the weather which often alternates between floods and drought (Nukunya 1975: 60-61, 1978: 36-45). Thus during the drought of late 1986 and early 1987, the worst in living memory, the whole of the Keta Lagoon and the smaller ones were dried up. This also affected shallot farms. However following the heavy rains of July-October 1987 and the flooding of the rivers and streams which feed the lagoons, have now risen sharply to flood their surrounding areas including shallot farms. While the flooding has been welcomed by the lagoon fisherman, it has paralysed the activities of the shallot farmer. The result is that for the period 1986 to the present neither the lagoon fisherman nor the shallot farmer has been in a position to function continuously under normal conditions. These interruptions due to climatic factors are common and regular features of the area. The circumstances of the maritime fishermen have however been very little affected by these fluctuations of fortune and it may be useful to start our comparison with them. This is not very easy. Interviews reveal that they keep very little record of their earnings because as one of them put it, "we just live from hand to mouth". This statement stems more from

an inability to keep records rather than improvident living since most of them have often managed to save enough money to put up buildings and buy some expensive clotheless. Reports from local company owners reveal though that incomes from local maritime operations for both the doto and the crew for the past three years have not been less favourable than those for the returning migrant companies. One local doto is reputed to have netted over five million cedis in a year and claims that an ordinary member could have made at least ₦100,000 net over the three years have not been seriously discounted. Not total incomes for shallot farmers and lagoon fishermen for the three years were mentioned as ranging between ₦250,000 - ₦1,500,000 and ₦150,000 - ₦500,000 respectively.

In dealing with local lagoon fishermen and shallot farmers, it is important to note that their levels of operation vary considerably. The size of individual shallot farms range between about ten beds and as much as two hundred beds. Clearly the financial circumstances of the smallest and the largest could not be the same though the vast majority fall somewhere between forty and eighty beds. It is also to be mentioned that the need to get the necessary capital to operate a farm puts those involved in the industry in a category of their own. Should one lose one's seed shallots through floods or drought for instance, replenishment of the stock may cost as much as ₦500,000 for the big timer and as little as ₦10,000 for the small one. This is not easy for many people. The position is not much different in lagoon fisheries in which one gill-net which is the commonest in use now and a canoe operated by one or two men are together valued at about ₦150,000. Some fishermen own as many as four nets but most people have just one. It is therefore not surprising that only 25 canoes and a total of 70 nets are currently actively operating at Woe (Pop. 5200) while at Anloga (19,000) the respective figures are 54 and 102. As land (shallot plots) is usually inherited, farming provides an easier and cheaper option than lagoon fishing since many people have access to land. Though the fishing gear and other requirements associated with the latter are also inherited their life span is much shorter making them less valuable as heritable property. Thus many who would have taken to lagoon fishing are prevented by lack of funds. Therefore it is from the remainder that we get full-time local maritime fishermen. At Woe for instance where maritime fishing and shallot farming are followed, the proportions of the population following the two occupations are fairly even but at Anloga shallot farming is the principal occupation supported to some extent by lagoon fishing.

Returning again to the migrant companies and their circumstances, it is necessary to state that though fishing is the reason for the expedition and the mainstay of the members, there are others who accompany the companies in order to provide them with some auxiliary services as carpenters, tailors and

masons. Some women also trade in goods other than fish while others engage in independent food preparations for sale to the group members. In Abidjan and western Nigeria especially some companies and individual families have also become permanent residents still pursuing their fishing activities or branching into other fields. In Abidjan for instance both men and women have been known to be engaged in property development on a fairly large scale. In Nigeria and to some extent in Benin Republic, many acres of coconut plantations have been developed along the coast by some of these migrant fishermen and their of spring and still stand in their names.

The permanent settlement granted to the migrants and the economic activities they are permitted to pursue in addition to their fishing activities, is a measure of their acceptance by their hosts and the cordial relations between them. In this connection it is significant to note that many marriages also take place between the two groups, the hosts and the migrants. Despite this apparent cordiality of relations however problems do arise leading sometimes to serious sanguinary conflicts and expulsions. In 1962 for instance there were serious disturbances in Abidjan between the migrants and the local people forcing the departure of virtually the entire migrant population. Within a year they started trooping back claiming that they had been recalled because the locals could not cope with the fish shortage created by their departure. Since then there have been sporadic troubles but nothing on the scale of the earlier one. Currently, some of the richer migrant women traders and owners of landed property have been returning home after selling their possessions because of harassment on the part the indigenous people. At the same time fishing companies on recess at home have started returning to the Ivory Coast. The conclusion to be drawn from all these is that the two communities need each other, however uneasy the relationship between them may appear.

As opposed to the difficulties experienced in the Ivory Coast is the relative calm characteristic of the migrants' relations with their hosts in Benin Republic and Nigeria. Here one must mention the cultural affinities between the Anlo and their eastern neighbours. The dialects spoken between the Volta River and Badagri all belong to the language cluster variously called Ewe, Adja-Tado, or Gbe for which the new names Tatoid and Mono are being suggested. Religion, social organization and cosmology are other areas in which convergence could be found (Nukunya 1988: 68). As such the Anlo feel much more at home there than in other foreign centres. The indigenes also for the same reasons feel closer affinity with them than with other migrant groups. This has led to a more cordial and informal relationship and explains why more permanent settlements have developed here than any other areas of operation including those in Ghana. It is instructive to note, in this connection, that during the expulsions of aliens from Nigeria in 1983 the Anlo

fishing communities including the permanent residents were not affected.

One major effect of these migratory expeditions has been the extent to which they have broadened the fishermen's outlook and knowledge of neighbouring countries. Here the interest is not only with the fishermen alone but also those directly related to them and their companies. For many migrants, the departure for a distant or foreign centre means saying goodbye to the frequent extended family demands, funerals and other local problems. However this move may only reduce the frequency of these demands. For places in Ghana and those in western Nigeria and the Ivory Coast regular traffic exists between their home-towns which enables messages to be sent to the migrants recalling them home in cases of serious emergencies. Visits from school children on holidays to their parents, relatives and friends also take place quite often. These travels have given the opportunity to many to know quite a bit about these centres of operation and the countries through which they pass. The Baule language spoken in Abidjan, Yoruba and Fon spoken in Nigeria and Benin respectively are now widely known among the migrants as are both Akan and Ga (Ghana) as well as French. Another interesting development has been the importation of the Gun (Badagri) and western Yoruba dance Gahu to the Anlo area. Thus the effects of these migratory movements go far beyond pure economic activities and relations.

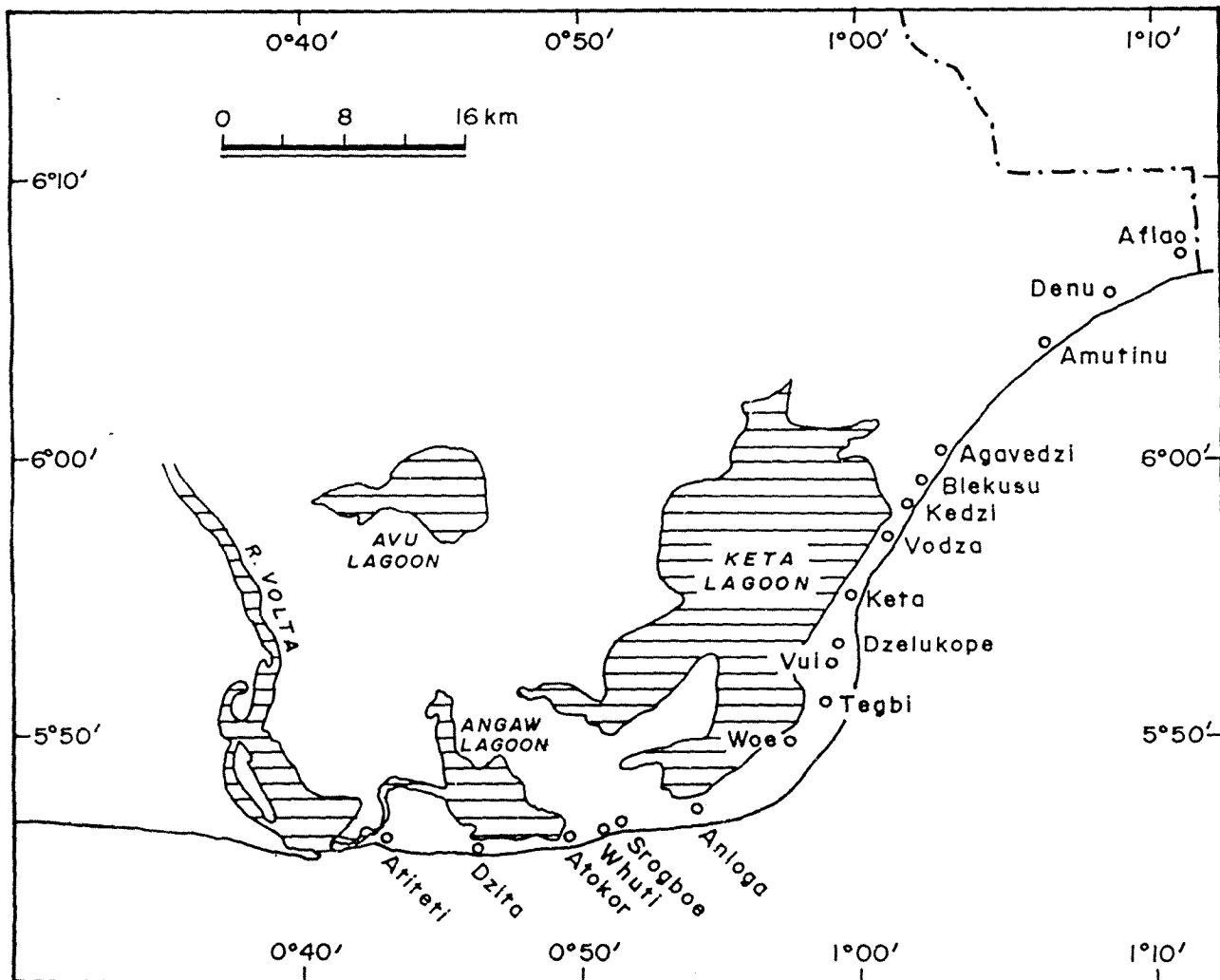
CONCLUSION

High population density, poor soils, unpredictable climate and the peculiar nature of the Anlo coast, hemmed in as it were between the sea and lagoons, have forced Anlo maritime fishermen to seek richer waters outside their home area. The migratory expeditions which are the direct outcome of this development have taken the Anlo to many places, far and near. In the process the Anlo as a people have become very well known all over the West African coast through their migrant companies which have also established them as principal off-shore fishing communities in Africa. As such no study of off-shore fishing on the continent can ignore them.

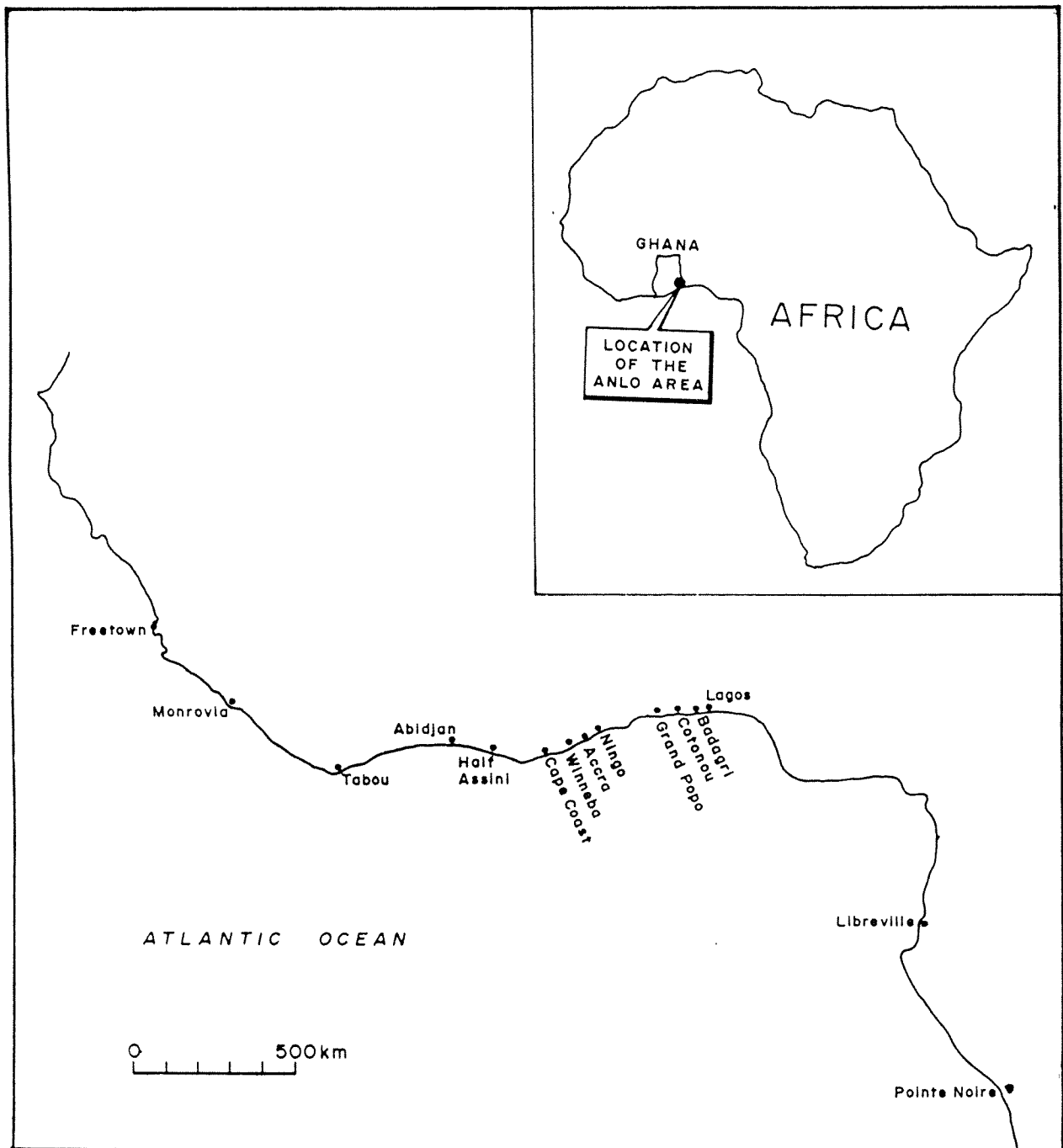
Though their migratory expeditions have been traced to the harsh physical environment, few people faced with comparable physical surroundings have responded so successfully and spectacularly. Visitors to the Anlo coast have often marvelled at their settlements in which the traditional mud and thatch house have been completely replaced by those of cement block with roofs of asbestos, aluminium or iron sheets. This transformation owes much to the people's industry which has resulted in the shallots cultivation and the seine - fishing both of which have made the Anlo famous. They have in addition made their mark in education, commerce and public service.

The ethos, values and other considerations which have enabled them to reach their present levels should make an interesting subject for further research which may help us to put the Anlo Ewe fishing in its proper socio-cultural perspective.

Map 1
THE ANLO COAST WITH THE MAIN FISHING SETTLEMENTS



Map 2
PRINCIPAL LOCATIONS OF ANLO EWE MIGRANT FISHERMEN



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**A note on some specificities of the artisanal fishing
techniques in Ghana and their low diffusion
through migrant fishermen.**

E. Charles-Dominique¹

Abstract

Data from bibliographical sources indicate that in Ghana, the artisanal fishing techniques present some peculiarities that are not met elsewhere in West Africa, as the large gill-nets used for the Sardinella fishing and the original ring-nets used for anchovy fishing. These techniques appear to be locally distributed, and seem to weakly diffuse out of their emergence center, even through the migrant fishermen originating from these areas.

1. Introduction

In order to assess the technological impact of migrant fishermen out of their country, it is necessary in a first time to characterize the technologies used in the different fishing communities and fishing areas. Habitually, the artisanal gears of West Africa are identified either by a local name (watsa, ali, etc.) or by some international standard identification (purse seine, gill net, etc.). In this paper, it is stated that behind, and sometimes in contradiction with these nomenclatures, some specific technologies may be hidden, which can have their own historical evolution, design, catches, etc.

In Ghana, according to bibliographical sources (especially Anum Doyi 1984), different original gears are met, like the so-called watsa net from the Ada area (fig. 1). An attempt to point out some significant peculiarities of these nets will be made. If they are considered as specific technologies, it is interesting to see if and how they have been diffused out of Ghana, and particularly through the migrant fishermen.

At a larger scale, beyond the specificities of some technologies, the organisation of entire sectors appear to be specific of some countries. The coastal pelagic fisheries so appear to be differently organised in Ghana and Sénégal, two major poles of technical diffusion in West Africa.

2. Peculiarities in the pelagic fisheries

The artisanal coastal pelagic fisheries are very developed in Ghana. They yielded annually 65,000 t between 1972 and 1979, i.e. about half of the total artisanal fisheries catches (Bernacsek 1986). Two main technologies are used and share the exploitation of these resources: the surface and mid-water gillnets, which are mostly drift nets, and three types of "ring-nets". The landings are dominated by the european anchovy Engraulis encrasicolus, the round and the flat sardine Sardinella aurita and S. maderensis, and some less important species like Brachydeuterus auritus, small scombridae like Auxis thazard, and other fishes (Bernacsek 1986).

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According to the "Catalogue of small scale fishing gear of Ghana" of Anum Doyi (1984), which founded this article, the artisanal fishing techniques show in Ghana some interesting peculiarities with regard to other countries in West Africa, in their present state as well as in their historical evolution.

2.1 Some originalities of the drift nets

In the surface gillnet fishery, the drift nets are far more developed (four main types) than the encircling active gillnets, used only for catching Ethmalosa fimbriata.

In most West African countries, the gillnets do not catch efficiently S. aurita. This can be explained by the behaviour of this species which avoids the nets by diving beneath them (Fréon 1988). In Ghana, this species is a target for a special drift net, the obue ali (Anum Doyi 1984). The main external characteristic that might explain the efficiency of this net for this species is its very large fall (30 to 50 m).

One other originalitie can be noted in the drift nets: the flikilo-yaa is used for catching some pelagic species that are rarely caught elsewhere, like Hyporhamphus spp. and Cypselurus melanurus. In this case, the design does not seem to have particular qualities.

Contrary to Sénégal and other countries, the surface gillnets do not compete directly with the purse seine fisheries for the same species, namely the Sardinella species. In Ghana, the ring-net fisheries are specific and research mostly anchovies, as it will be seen below. This may explain, among other things, that they did not outcompeted the drift nets, which followed the general growth tendency (increasing in the size of nets, teams and boats) and "modernization" (motorisation).

2.2 The watsa-like "ring-nets"

The artisanal "ring-nets" of Ghana present at least three peculiarities in their construction (fig. 2):

- the net is made up of various mesh sizes (four to five different mesh sizes on the same net)²

- the bunt (strengthened netting which gathers the fish) has a central position. Elsewhere in the world, the purse seines or lampara with a central bunt are always operated with two boats (Von Brandt 1984: 304). In Ghana, these gears are handled from one boat, that complicates the fishing process, because it is necessary to put half of the net outboard and reorganize the net between two consecutive sets.

Surprisingly, this is not the case in Ghana, and could be seen as an indice of the innovation capabilities in this fishery

- the design is very complicated. For instance, figure 2 shows a Ghanaian watsa net made up of 11 different nettings.

According to Anum Doyi (1984), three types of such ring-nets exist in Ghana: the watsa, the poli-sieve and the achiki na oye. These gears differ by the mesh size of the bunt (10 to 18 mm, fully extended) and by the disposition and mesh size of the other nettings. Apart the bunt, the watsa is mostly made

² according to Von Brandt (1984), this kind of multi-meshed type of gear is not a typical purse seine, and should be rather called more generally a "ring-net"

up with "large" meshes (38 to 50 mm, namely the mesh size used in the drift nets fishery), whereas the poli-sieve is made only with small meshes (10 to 13 mm), except on the borders, and the achiki na oye is intermediate with medium meshes (25 to 31 mm) bordering the bunt.

The species caught are slightly different in the three types: the watsa net is used for anchovy fishing (Engraulis encrasicolus), and possibly other fishes, even middle-sized pelagics; the poli-sieve is used mostly for anchovies, and achiki na oye for anchovies and small coastal species.

Some authors have attempted to understand the role of these gears and their usage by the fishermen:

- they allow to catch anchovies, which had never been possible previously on the open sea (Rawson 1988). This species is presently the first pelagic resource in this country, with landings of 30,000 to 40,000 t per year between 1971 and 1986 (Bernacsek 1986, Haakonsen 1988).

- for Vercruijssse (1984), "there can be no question that the connecting of strips of different types of netting turned the ahwea [synonym of watsa] into a truly multi-purpose net". According to this author, this gear allows to catch efficiently not only anchovies but other pelagic species, like Trachurus spp., and would for this reason allow the fishermen to fish all times of the year.

In our opinion, this point is more questionable: there may be other advantages in using large meshes with a surrounding net, as the faster falling of the net into the water, the higher resistance of the net, lower price, easier handling, lower weight, etc. To assess the strategies of the fishermen, accurate studies of the composition of the catches (the result) with a given gear would be necessary, as well as studies of the objectives of the fishermen. The only data available to us on the catch composition of the watsa nets are given by Faggianelli and Faggianelli (1984) in Togo. These authors studied a sample of gears named watsa, the description of which is close to that of Anum Doyi. The landings were composed in 1984 of 71,2 % anchovies, 12,4 % Sardinella aurita, and 16,4 % of other species, with no marked seasonal variation of this composition. This figure evokes rather a specialized technique for anchovies.

The watsa seems to come from the Ada area (fig. 1); nowadays, it is a local type known almost only from this area and from the neighbouring Togo. The two other types of ring-nets have also a local repartition, that overlap in one case.

The origin of the watsa seine was questioned by several authors. The name yet appears in the Brown's (1947) description of Ghana's fisheries, where it applies to a long gillnet with strong yarn used for catching some middle-sized pelagic species (mostly little tunas). In the late 1950's, the name applies to a new gillnet, made up of different strips of netting (Vercruijssse 1984). The present watsa ring net seems to have appeared approximatively after the true purse seine has been introduced in the industrial fisheries in 1957. Thus, it might be a combination of these two innovations.

3. The diffusion of these techniques out of Ghana

From the above considerations, one can define an original seine, a "multi-meshes ring-net with a central bunt", from Ghana and Togo, with three local types, these seines catching mostly anchovies.

This kind of gear does not seem to be found elsewhere unchanged, even in the areas where migrant Ghanaian fishermen are present. The local name watsa is however used among most of the Ghanaian migrant fishermen out of Ghana³. In Cameroon, the purse seine described by Seck (1987) is locally named watsa, and was thus probably introduced from Ghana. It has kept its multi mesh design but lost the central position of the bunt (fig. 2).

In Ivory Coast, Ghanaian fishermen are numerous in the artisanal pelagic fisheries. In Sassandra (K. Delaunay, pers. comm.), the Fanti fishermen use two purse seines types, both with homogeneous meshing: the seef one, with small meshes, is the more frequent and is used for Sardinella aurita fishing, while the watsa one, with larger meshes, is used for larger species (Carangidae, Polynemidae). A trace of the original type whereas exists with a few multi-meshed seines (also called watsa), found in some fishing units.

In this area, a pelagic drift net, called adi, has been used formerly for S. maderensis fishing. Presently, it remains used in association with the seines, especially in the beginning of the fishing season when the Sardinella schools do not appear well defined to the fishermen.

Near Abidjan are found "true" purse seines (homogeneous netting, lateral bunt) in the Fanti and Anlo fishermen (the last ones belonging to the Ewe group). Ecoutin and Delahaye however showed that some significant differences appear in the design and utilisation of these purse seines between the two communities (Ecoutin and Delahaye 1989).

No gillnet are reported to catch principally Sardinella aurita in Togo, Ivory Coast, Sénégal nor Guinea (Salles 1989). On the contrary, this species is caught in Congo by a surface drift net with a small (less than 10 m) fall (Gobert 1985).

4. Discussion

The Ghana's artisanal fisheries have reached a high level of productivity (presently about 260,000 t per year), far beyond the first estimations based on global biological assessments. This growth can largely be explained by an intensification of the fishing effort (increasing of the size of nets, boats, etc.), but is also probably due to some qualitative evolutions of technologies.

Some technical aspects appear undoubtedly as products of a local evolution. So, the central position of the bunt is certainly not an indifferent choice, because it complicates greatly the handling of the net, which has to be entirely reorganised between two sets (Batch Koffi, comm. pers.). Also, the large meshes allow the net to fall rapidly, but favorize escapement. To limitate the escapement through mesh, a technique has been developped, named sissi among Fanti, which consists to tighten small ropes inside the seine after it has

³ the utilisation of a local name for technically very different gears (but often with a common origin) is frequent: for instance the name ali refers to pelagic drift nets in Ghana but in Aby lagoon (Ivory Coast) it refers to large beach seines without bunts among Ghanaian fishermen

been setted in order to keep the fish in the upper part of the net (Batch Koffi, comm. pers.).

In the long period, these technologies can be seen as major options and may fundate progressively different "models of exploitation". So, for the main pelagic species, Sardinella spp. and Engraulis encrasicolus, the ghanaiian and senegalese organisation of artisanal fisheries appear quite different.

In Ghana, the anchovy fishery is based on original "ring-nets", which are mostly products of a local evolution; Sardinella species are mostly caught with large drift nets. In Sénégal, the purse-seine fishery expanded very rapidly from a type of gear introduced from Europe, and remained apparently unchanged since that time. On the whole, the anchovy fishery is fewly developped in this country.

In conclusion, some evolutions, divergent modeles, original knowledges appear in the artisanal fisheries technologies. These aspects may structure deeply the exploitation patterns, the relationships between fishing communities, and allow a more or less intensive fishing. However, as we have seen, these aspects are not well known and can be hidden behind nomenclatures, as well local as "international".

A scientific research on these aspects seem necessary. Some questions arise :

- why did not the migrant ghanaiian fishermen export the original design of the watsa net?⁴

- why don't the Ghana's fishermen adopt the purse seine for fishing the Sardinella species, though knowing its principle?

- why are the drift gillnets techniques prefered in Ghana for fishing Sardinella, but not elsewhere - Ivory Coast, Cameroun, Sénégal, etc. -, even where the ghanaiian migrant fishermen are present?

⁴ The abundance of the likely target species, the anchovy, cannot explain simply this point. Some acoustic surveys found higher biomasses between Mauritania and Sierra Leone than in the Liberia-Ghana region (Strømme 1984). In some cases, some economic factors can be involved: for instance, in Ivory Coast, some ghanaiian fishermen declare to have little interest in anchovies because of a low demand for this species (K. Delaunay, pers. comm.).

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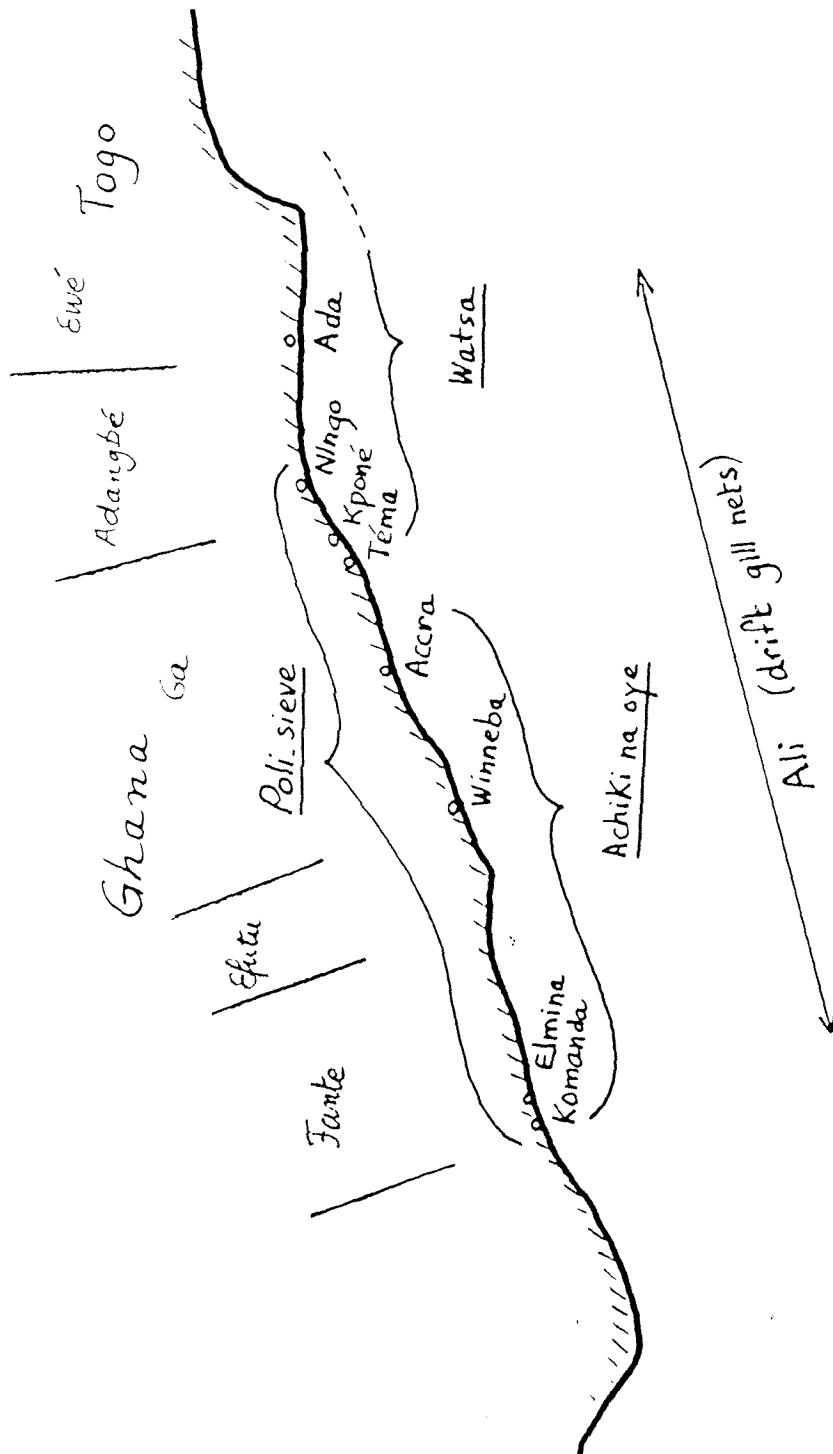
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Legend of figures

fig. 1.- Geographical repartition of the artisanal pelagic fisheries in Ghana (Anum Doyi 1984). Watsa, poli-sieve and achiki na oye are ring-nets; Ali are drift gillnets. Fante, Efutu, etc.: ethnomyms.

fig. 2.- Design of three kinds of ring-nets named "watsa" in Ghana (1), Cameroon (2) and Ivory Coast (3)
(1) the original Ghana's type (in: Anum Doyi 1984), with severall mesh sizes and a central bunt
(2) the Cameroon's type (Seck 1987), with severall mesh sizes and a lateral bunt
(3) the ivorian type (from: Cantrelle et al. 1983, gear copied over a Fanti seine of Vridi, near Abidjan) with a single mesh and a lateral bunt





FLows AND MOVEMENTS IN THE GHANAIAAN CANOE CARVING INDUSTRY

by G.T. Sheves

1. Introduction

The artisanal fishing fleets in West Africa are a major source of low cost protein. In Ghana for example around 70 % of the total annual catch of about 260.000 tons are landed by the canoe fleet. This sector has developed rapidly over the last 30 years with the introduction of the outboard motor and associated innovations in gear, particularly purse seining for small pelagics.

Ghana is the major source of canoes for countries from Liberia to Benin with sizeable fleets in Congo, Cameroon and Gabon. In all there are estimated to be well over 10.000 Ghanaian canoes in operating on the West Coast of Africa.

The Ghana dug-out is ideally adapted to heavy surf and harsh landing condition. The craft is relatively cheap and carved by village artisans from single logs of wawa (*Triplochiton scleroxylon*).

Growing demand for larger canoes in recent years have forced carvers to travel greater distances inland to find suitable trees as resources in previous locations have become depleted.

It is known that wawa resources in Ghana are heavily exploited. At present the species, although the most abundant, contributes 32 % to total annual extraction. Remaining stocks of these trees are under heavy pressure for uses other than canoe carving and eventually trees of a size suitable for carving large canoes (i.e. + 165 cm in diameter) will become rare.

To avoid serious dislocation in the fishing communities dependant on the dug-out canoe, the FAO has been examining the situation with the objective of introducing a suitable replacement craft.

As part of the research into the characteristics of a replacement craft the existing canoe carving industry has been studied.

This paper focuses on the types and volumes of flows and movements within the industry.

b) What conditions movements in the human environment ?

Long and short term displacements of people in varying degrees of volume and intensity are characteristic of human activity. long term and high volume movements are associated with war, persecution and imbalances in economic opportunities. Short term, often circulatory movements, can be identified with seasonal availability of grazing, harvests, and of course the localised appearance of fish schools.

Daily commuters also exhibit movements due to dislocation of residence and work place.

Basically, movements in human activity are the products of negative and positive pressures - push and pull factors. Whereas religious persecution would represent a negative pressure - a push factor, movement prompted by better economic opportunities would be a positive force, or pull factor.

3. Movements in the Ghanaian Canoe Carving Industry

Excluding the demand for canoes which is the fundamental motivation for the existence of the canoe carving industry, both push and pull factors explain the movements and migrations which characterise the trade especially in recent years. The factors are :

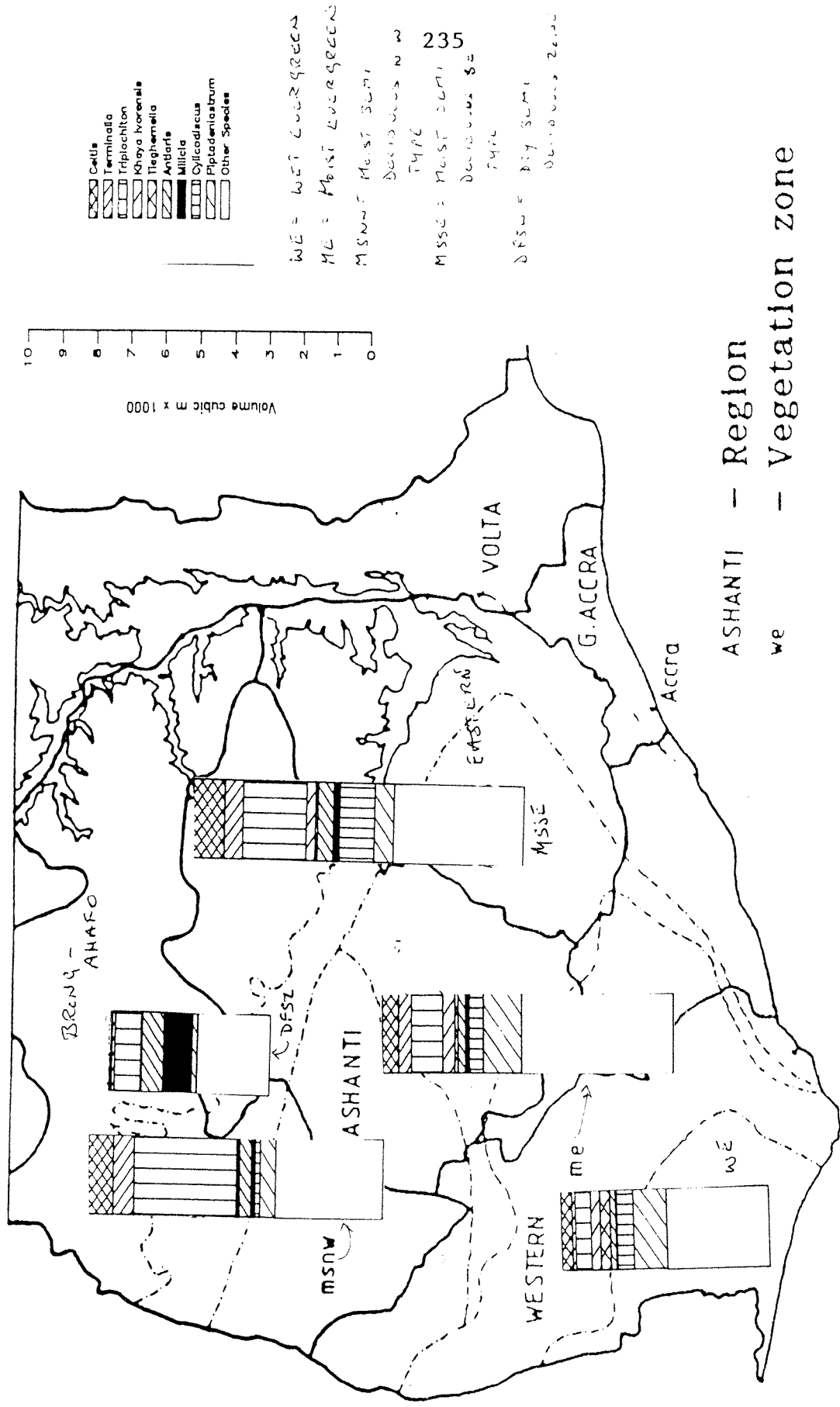
- a) availability of supply of suitable tree species - pull
- b) availability of supply of specific trees - pull
- c) depletion of previous sources of supply - push

Availability of supply of suitable species

The spatial distribution of living natural resources depends on local and regional ecological and climatic conditions. Wawa or *Triplochiton scleroxylon* occurs obiquitously in Ghana but is more prevalent in the most semi-deciduous S.E. type vegetation zone and most abundant in the moist semi deciduous N.W. type vegetation zone. This gives a progression in abundance in a north and westerly direction broadly from the Eastern region through Ashante to the Brong-Ahafo Region.

The occurence of the raw material for canoe carving is the fundamental basis for the location of the industry. The distribution of wawa is shown on map N° 1.

MAP 1 Administrative regions in the high forest zone of Ghana



ASHANTI - Region
we - Vegetation zone

WE = Wet Evergreen
ME = Moist Evergreen
MSNW = Moist Semi-Deciduous
MSSE = Moist Semi-Deciduous
DSD = Dry Semi-Deciduous
Other Species

235

Availability of supply of specific trees

Not only does wawa occur most abundantly in the Ashanti/Brong-Ahafo regions, but the condition favoured by the species improve towards the most semi deciduous N.W. type vegetable zone which encourages the emergence of a high proportion of forest cover of wawa and also a higher incidence of the individually large specimens now in demand for canoe carving. Also this area has come under relatively less intensive exploitation pressures than more accessible resources nearer the coast.

Depletion of previous supplies

Both canoe carvers and fishermen verified that not only was it now necessary to travel greater distances inland from the coast to find a supply of trees but also those which could be located were deeper in the forest than previously was the case.

The general location of canoe carving is therefore determined basically by the the occurrence of the raw materials but more specifically by the local availability of suitable individual specimens. Thus although the potential exists for canoe carving to be wide spread in the ecological zones favoured by wawa, the depletion of resources in the more accessible areas near the coast has forced a movement in canoe carving operations into the more prolifin and less heavily exploited areas to the north and west.

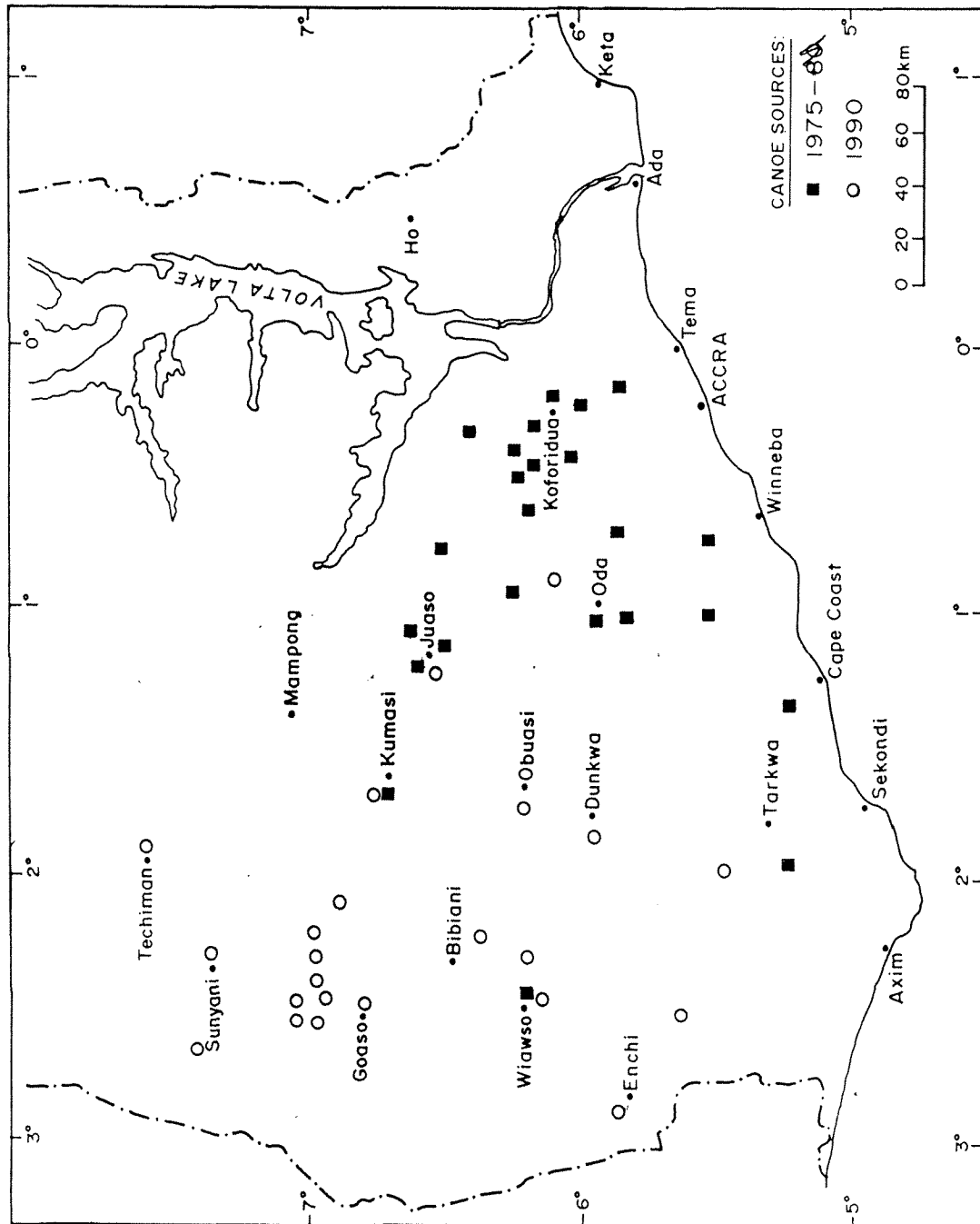
The changing situation is shown on map N° 2, wich depicts the sources of canoes in 1975 and currently. Here the north and west tend is clearly seen. By applying a simple centre of gravity analysis the temporal-spatial development can even be roughly quantified. In 1975 the locus of operation was at approximately 6°15'N ; 0° 45'W the nearest settlements buying ABOMOSO in Eastern region, while in 1990 the position had shifted to 6°40'N, 9°15' west, at Kukoum in Brong-Ahafo. This represents a linear displacement of the centre of canoe carving operation of 200 km over the last 15 years.

3. Migration patterns with the canoe caving industry

During the studies a total of 9 canoe carving teams were interviewed. These can be classified broadly into three categories : sedentary indigenous part time carvers and farmers ; formaly migrant carvers, non sedentary part-time curvers and farmes ; and highly mobile professional full-time curvers.

The first two categories were now confined to operating in an area close to their home or adopted village and were using trees already known but rejected in the past as being unsuitable due to size or shape. In one case the chief carver had arrived

MAP 2 CANOE SOURCES



36 years, previously with his father, who was also a carver. At this time there was a total of seven groups in the vicinity (Obogu south of Juaso), but now only three, all of which engage in farming. The other four groups had already moved on in search of a more secure supply of trees. As an indication of the quality of tree now being used by the carver with a 3-5 km radius of the village, of six canoes completed in 1989, four were rejected by fishermen as being of inferior quality.

This and other sedentary groups were in contrast to the professional migrant carvers who operated in an area until the supply of suitable trees was exhausted and sent "scouts" ahead to contact concessionnaires and farmers within promising forest areas.

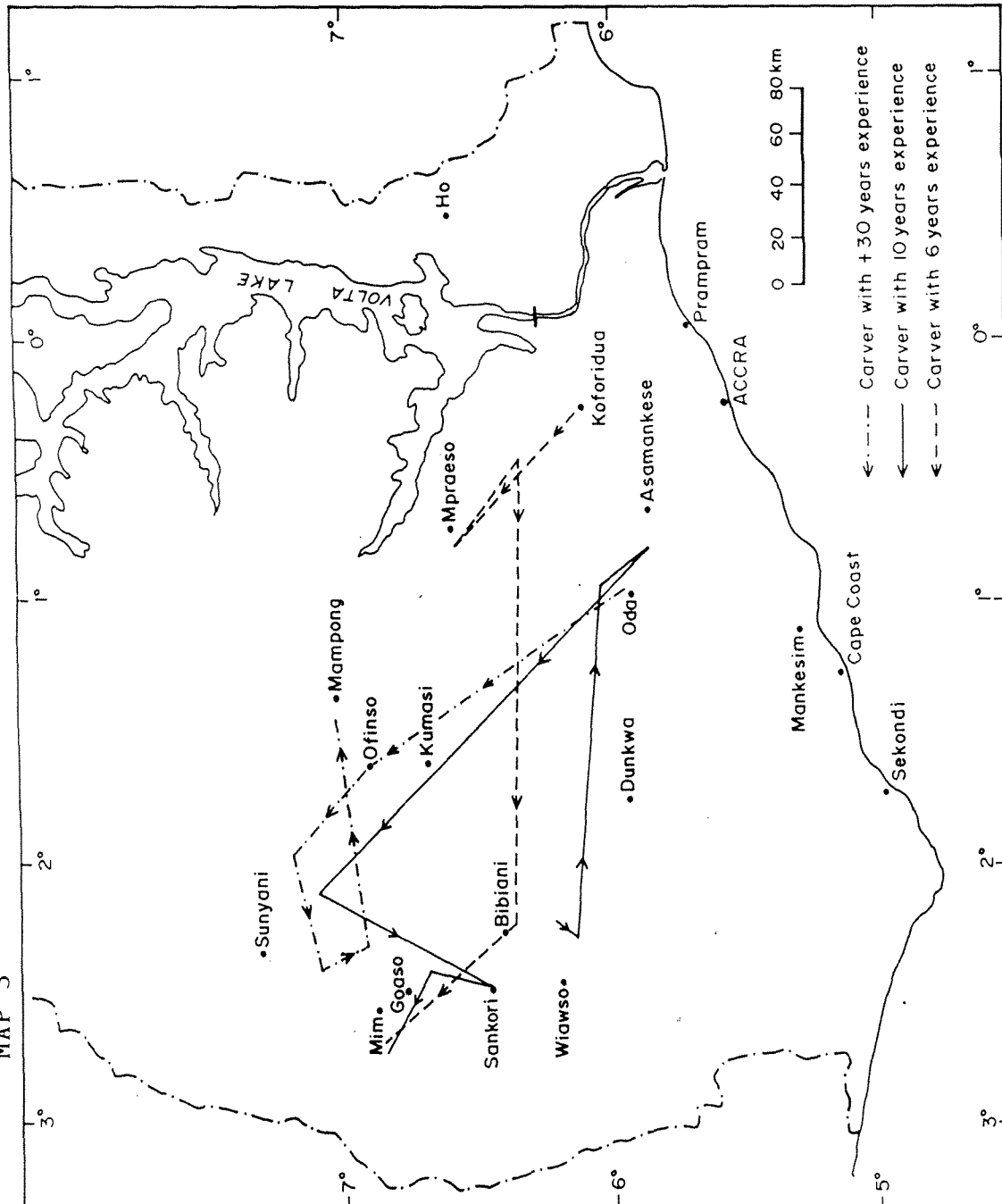
The professional carvers cover considerable distances in the search of trees. The majority of the professional group come from Pram-Pram in Greater Accra Region. Several of these groups were located in Brong-Ahafo. One group in particular numbering 13 people and composed of 3 masters carvers, 4 general carvers and 6 apprentices had taken temporary accommodation at Akrodi (20 km from Goaso). Not only do they migrate to the general location of the resource but once installed their daily work entails secondary migration from their temporary base. This group for example walked from Akrodi 16 km into the forest to the hamlet of Kusikrom where they lodged for 3-4 days at a time walking each day 3 km into the forest to carve.

The movements of these professional carvers are shown in map N° 3. In each case the general displacement is towards the north and west and the pattern correlates clearly with the change in location of canoe sources in map N° 2.

Apart from the distances involved the sedentary and professional carvers migrating patterns differ in form. These can be shown schematically.

In the case of the sedentary carver, who operates from a permanent base but in the surrounding forest up to a radius of 20 km, the main movements are radial from the centre with branches into the forest where trees are found. The movements give a filigree or cobweb pattern which would approximate to figure I.

MAP 3 CANOE CARVER MIGRATION PATTERNS



For the professional carver who is continually on the move with no permanent base but a series of temporary stops where he can find trees, the main movement is linear as in map n° 3. From his temporary bases sorties are made into the surrounding forest just as with the sedentary carver. The combination of the primary "stem" migration and the "branch" migration to the working sites by the professional carver gives a dendritic pattern as shown in figure II.

4. Source and distribution of Ghanaian dug-out canoes

To ascertain the number of new canoes arriving at the coast annually from the forest zone, a canoe transport survey was conducted between the 28 February 1990 and 13 September 1990. Initially this was to cover the whole coast, but several difficulties arose at some of the check points resulting in useful but fragmentary information. The survey however was well conducted by the police officers permanently stationed at the Atchimola and Asankar barriers.

The results from the survey provided is shown in map n° 4. In all a total of 251 individual canoes were registered during the 197 days of the survey. Thirty eight canoes registered could not be traced to source as the village/hamlet could not be located. These were known, however, to have passed Asankora and therefore the flow diagram has been increased by 38 at this point.

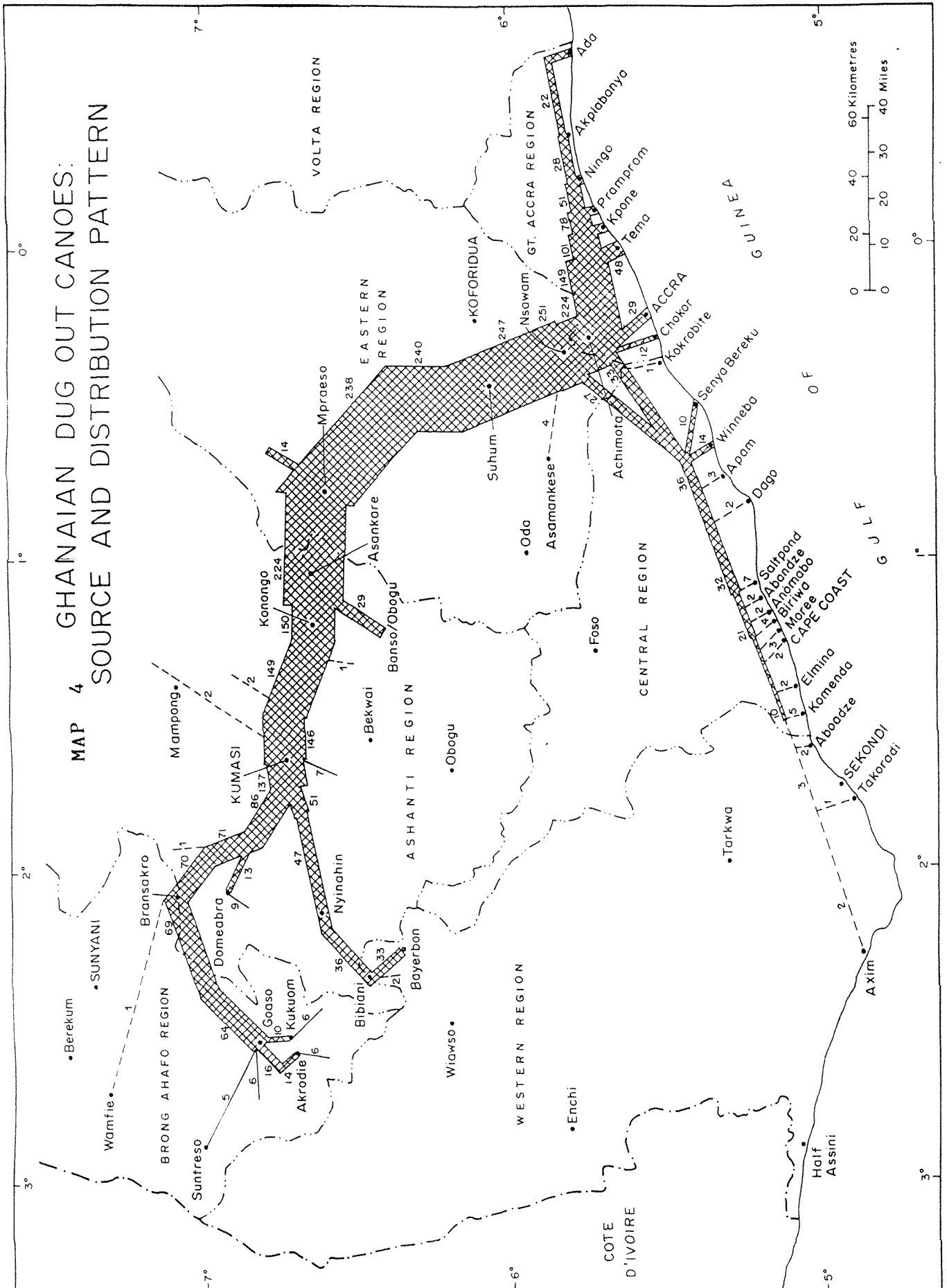
Of the 251 canoes traced, 224 originated in Ashanti and Brong-Ahafo Region and north of the Western Region from around Bayerbon.

The most distant sources were Wamfie and Suntreso some 400 km from the coast at Accra and only 30-40 km from the Côte d'Ivoire border.

Even when reaching the coast, canoes can be transported considerable distances. The two canoes delivered to Axim in Western Region for example originated from Goaso in Brong-Ahafo Region. Thus the total distance travelled was nearly 600 km.

A significant feature of the distribution pattern of canoes along the coast is the high number which go to the Greater Accra Region. This region accounted for 76 % of all the canoes registred. To some extent this is explained by the registration of canoes only at Achimota barrier to 18 May 1990 when a certain proportion can be expected to have passed off to the Central and Western regions above Achimota. Nevertheless the relatively and absolutely low figures for canoes destined for the central and Western regions from the Kumasi-Accra route indicate strongly that other routes exist. This is confirmed by the result of a

MAP 4 GHANAIAN DUG OUT CANOES:
SOURCE AND DISTRIBUTION PATTERN



questionnaire survey carried out by the regional fisheries officers. The results are given in table I which shows that 43 % of the canoes arriving at Central and Western region, destinations are from the forest areas in these regions.

Of the high number of canoes arriving in the Greater Accra Region not all will be to replace existing canoes at their destination. At Kpone, Tema and Pram-Pram there are groups of carpenters who specialise in finishing off canoe hulls from the forest. A proportion of canoes arriving at those sites therefore will be completed there before entering the local fleet or being distributed to their final destination. Some of these will go to the Central and Western regions, although reciprocally canoes from these region will also enter the Greater Accra fleet. The majority of canoes arriving at the Greater Accra Region will however, stay, to replace ageing canoes which will be scrapped or sold on as second-hand depending on their condition.

There is for example a strong demand for second hand canoes in Volta Region where beach seining is predominant. This type of fishing, operated close to shore and often non-motorised, does not demand such a strong and sea-worthy canoe as would purse seining or deep sea hand-lining.

There is also a substantial trade in canoes from the Greater Accra Region with neighbourly countries. In 1979 for example, it is know that 9 poli canoes were fitted out at Lighthouse beach for Nigeria owners for Calabar. These canoes now operate with Accra fishermen hired to train Nigeria crews. Other villages also have trading links with neighbouring countries and such as Anyaman and Ningo where canoes are sold to Côte d'Ivoire, and to countries to the east as far as Cameroon.

FISHERMEN'S MIGRATIONS
IN TOGO AND BENIN*

by Cyriaque Atti-Mama

Fishing, herding and farming in general are ancient activities for Man; they seem to flow from a slow and difficult apprenticeship to mastery. It is difficult, if not impossible, to situate the beginning of fishing on internal waters (lakes, lagoons, rivers) in Benin and Togo. However, maritime fishing has a history allowing us to situate and appreciate its evolution.

In the opinion of different research workers, Beninese, Togolese and others (Pognon, Pliya, Inoko, Sessi, de Surgy), the Beninese and Togolese ethnic groups implicated (Plah, Pedah, Ewe), having a more or less long sea fishing tradition, only fished the rivers and lagoons to begin with. Their first contacts with the sea during the colonial period were not so much as fishermen, but as boathands itinerantly trading off different harbours - Ouidah, Agbodrafo, Grand Popo, etc. These first contacts helped them overcome their fear for the sea and take to fishing. However, it would appear that real initiation to sea fishing was brought by migrant Ghanaian fishermen at the beginning of the century, along with more appropriate equipment (craft, nets). After this initiatory period, several migrations of Ghanaian fishermen joined ranks with the natives.

Today's estimation counts respectively 45 to 50% of Ghanaian fishermen in maritime artisanal fishing in Benin and 60 to 70% in Togo.

1. Migratory Features

It should be pointed out that the term "migration" is used in this text in its true etymological sense, that is "movement of a population from one country to another in order to settle there". From this point of view, and with reference to the fishermen, one may speak of "maritime nomades". However, though several kinds of migration exist, two stand out in particular.

- migrations of long deviation: these are movements and settlements lasting several years (20 to 40 years and sometimes more) outside their native country. All things considered. From the point of view of status and integration (as we shall see further on) these fishermen still consider themselves and are considered by others as "foreigners".
- migrations of short duration or seasonal, which only last one or two fishing seasons, followed by a more or less long stay in the native country.

* Translated from French.

another kind of movement observed these last five years in Togo and Benin are internal, concerning coastal fishermen moving to the fishing ports at a certain time of year to take advantage of facilities in access to the sea and the presence of markets in the large ports. Although this kind of movement does not comply with the

true meaning of migration, it is nevertheless a phenomenon which considerably changes the aspect of fishing and can in the long term lead the dispersed fishing towards grouped fishing around the large centres.

2. Who are the migrant fishermen to be found in Benin and Togo?

The Ghanaian fishermen to be found along these two coastlines are mainly Adan: coming from Great Ningo, Prampram, Kpone and Tema in Greater Accra region; the Ewe also known as Keta or Anlo from the Volta region and the Fanti from the Central region of Ghana. The quantitative importance per ethnic group is given by frame surveys carried out in both countries.

Table 1: Native and migrant fishermen in Benin and Togo

	1980		1982		1987	
	N	M	N	M	N	M
Togo	825	1,464	61	115	104	96
	36%	64%	36%	65%	52%	48%
Benin	-	-	-	-	85	73
	-	-	-	-	52%	46%

N = Native

M = Migrant

Source: Productions Animaux (Togo) Enquetes cadres 80, 82, 87; Projet Modele (Benin)

Upon examination of available data and studies carried out in this field, it appears that at least 60% of the fishermen operating in Togo are Ghanaians; this proportion falls to 45 to 50% in Benin.

It is to be noted that most of the fishermen, even Togolese, are of Ghanaian origin (Sessi, 1988). the two coasts in question are exploited by fishermen originating in either one or the other country. but in reduced numbers near the borders and ports.

The craft used in artisanal maritime fisheries in Togo, Benin, as in many other West African countries, come from Ghana. These are dug-out type canoes which vary in size from 8 to 18 metres.

The Ghanaian fishermen operating in Togo and Benin seem specialized in different fishing techniques according to their ethnic group. Thus:

- the Pram-pram and Ningo use lines
- the Adan use purse seine
- the Fante use purse seine and lines
- the Ewe (Anlo, Keta) purse seine and sardinella drift net.

The fishermen, whether they are Ghanaian, Togolese or Beninese, practice a family-type exploitation, with the predominance of the craft owners' family members and immediate sharing after an outing. However, when the latter emigrate to other countries they adhere to the "company" system. This system, widespread among the migrants, consists of recruiting a crew on a contract basis of one or two fishing seasons.

The distribution of takings with the migrant groups usually takes place in Ghana. The general expenses (running costs, repair, crew's food and medical care) are divided into two equal parts: one for the crew and one for the owner of the craft and equipment. Of all means of distribution to be found, this fifty-fifty division seems the most commonly used by migrant fishermen.

It is to be noted that the final earnings of any one crew member depends on the amounts borrowed from the crew's account or from the company leader. Upon distribution, all debts contracted before or during the fishing campaign are deducted from the earnings. At this point only, the migrant fisherman can assess whether or not he has met the objectives he set himself upon leaving home.

3. Migratory Reasons

These reasons for why the fishermen leave their homes to fish elsewhere are multiple and come in many forms.

Firstly, it must be emphasised that the Ghanaian fishermen have the longest fishing tradition and the better skills in this field than most fishermen along the West African coast. The beach seine seems to have been introduced in 1784 by the Danish at Prinzenstein port (Ghana) and adopted by the Keta natives around 1855 - 1860 (Pliya 1979).

In the opinion of migrants questioned in Togo and Benin, the fundamental reasons for their spreading along the West African coast are not related to the fact that Ghanaian waters are poorer than the others but:

- a) opportunities to put aside savings are greater elsewhere than in their own environment. This is enhanced by a system of exploitation, the "company" or seasonal contract, whereby takings are distributed at the end of the campaign. At home, numerous unavoidable obligations (household needs, the presence of parents, friends, close relatives, diverse ceremonies, etc.)

cause distribution to take place after each outing, which does not make saving possible.

- b) the pursuit of fish, especially sardinella, which migrates from west to east. Ghanaian fishermen or any other competent fisherman can be compared to a good hunter who searches for and pursues game where it is to be found. This is the motivation behind moves made in the same fishing season. Sometimes this pursuit is satisfied by fish in abundance and a worthwhile market place nearby.
- c) access to foreign currency. The non-convertibility of Ghanaian money (the "cedi") makes the franc zone the more privileged destination for a Ghanaian fisherman out to earn money. In spite of the gradual opening of the Ghanaian currency market, the CFA countries remain more advantageous to migrant fishermen of Ghanaian origin.
- d) "fishmammies" facilitate conditions for the acquisition of equipment and exploitation of resources in Lome and Cotonou ports: this satisfies the need to acquire fishing equipment that is difficult to obtain back home. The phenomenon of advance financing (partially or entirely) of equipment and the monopolizing of the purchase of the catch is more accentuated in Lome where certain "fishmammies" invest enormous sums (sometimes as much as 10 million FCFA).
- e) the possibility of buying small-meshed nets in Benin and Togo used for anchovy fishing in Ghana. It would appear that these nets have been severely restricted there for some time now. This explains why the Ghanaian fishermen (especially seasonal) come to Togo and Benin in order to buy some after one or two seasons' fishing.

All things considered, the Ghanaian, Beninese (Popoh), Togolese etc, play the same role in fishery as their haousse, senegalese, malian and yoruba colleagues in commerce. In as much as the latter are present wherever there is commerce, the former are everywhere there is fish to be caught.

4. Life in host countries

Migration does not seem confined to any particular age-group, simply the active population (15 to 45 years of age). It is to be noted that the 25 to 35 year olds are slightly predominant and some elderly persons are found among those migrants of long duration who are sometimes permanently settled.

4.1 Establishment

In Togo and Benin no particular measures have been taken by the governments with respect to fishermen immigration. In these two countries, the migrants are admitted and freely carry out their activities, almost outside any control.

The only measure taken is to inspect the foreign craft on their arrival in Lome port (Togo). This inspection is carried out by customs or police. The team leader is indentified and also the "landlady" of the crew, often a fishmammy consignor, established. Even in Togo, the annual port taxes are the same for foreigners as for native fishermen. The only difference is found in the fee for the professional card, paid 500F by natives but 2000F by foreigners.

Settling of migrant fishermen in a new camp differs depending on whether it is situated in a port or on the coast. However, in either place, the migrant is always introduced by someone: a former migrant, the fishmammy, a friend, an acquaintance, etc.

In the port, Lome in particular, the fishmammy or friend negotiate a plot with the landowner, paying a fee of 25 to 35000 FCFA per fishing season lasting up to 6 months.

On the coast in both countries, the migrant head fisherman is presented to the landowner or to the local chief if there is one, who gives him a piece of land to settle on for a symbolic gift of a bottle of schnapps and a small sum of money - 500 to 2000 FCFA.

Whatever the case, the migrant is not allowed to use building material of a permanent nature nor plant perennial trees as the site is considered as a temporary concession.

4.2 Integration in the local environment

In host countries, the migrant seems to have two main preoccupations: success in his activity and the profits to be made. His whole life is organized with these two objectives in mind and anything drawing him away from them rarely meets his approval.

It should be noted, however, that the level of integration is more or less high whether it concerns "sedentaries" or "seasonals". The following elements will allow us to measure the level of migrant integration generally:

- Composition of migrant crews

Socio-economic studies carried out on the Benin Model Project, Programme for Integrated Development (ATTI MAMA and RAIS, 1986), reveal that in the private crews

of those villages investigated by the project (more than half Ghanaian) only 9% of the population comes from villages in the interior, i.e. native.

The crews are already put together in Ghana especially when they belong to "companies". When native men become members of migrant crews, they only hold secondary roles, for reasons such as inexperience, etc.

- Alliance

Exchanges between fishermen in the three countries under consideration are facilitated by a common language spoken in Southern Ghana, Togo and Benin, through the Anlo-Ewe, and the Gen or Mina. There is therefore no language barrier to be overcome.

In the opinion of the native population and the migrants, many friendships are born between young migrants and local girls and vice-versa, but they rarely lead to marriage.

Generally speaking, the choice of a spouse is determined by social position (one marries one's own kind), professional (people of the same profession) and geographical seasons.

Although the fishermen (native and migrant) are of the same profession and living together in the same place, they do not inter-marry (not in sufficient number) and it is probable that ethnic endogamy is the strongest tendency in this environment.

The few marriages observed are between sedentary persons and natives, that is between people whose ethnic difference is usually a consequence of long cohabitation.

- Implication on developmental structures

Throughout our investigation, we did not meet any migrant fishermen in responsible positions, so we presume there are not too many of them in such positions. The responsibility assumed by the elders is often that of representing the foreign fishermen in dealings with the native population and the local political and administrative authority. This means that migrants retain their foreign status and are considered as such. When faced with developmental tasks in his host environment, the migrant fisherman is somewhat reticent. This was observed in those villages investigated by the Project Modele Benin of the Programme for Integrated Development in West Africa. Requested to participate in communal tasks, the migrants show little enthusiasm unless the tasks to

hand really concern them (such as the sinking of wells) or from which they cannot abscond (such as repairing the roads they frequent).

4.3 Relationship with their native environment

Essentially, two elements link the migrants to their place of origin (whether they are seasonal or of long duration). These are their family and the particular ceremonies attached to their family circle. The migrants are mainly adults and many of them are married.

In leaving home in the pursuit of fish, the fisherman leaves his wife behind and must therefore send money to her from time to time for the upkeep of the family or ageing parents. JORION estimates at 10 to 20 000 FCFA the monthly amounts sent home by Beninese fishermen in Gabon and Congo. Sometimes the fisherman travels with his wife (or one of his wives) who immediately becomes a member of the company in the commercialization of the crews' catch. Apart from the wife or parents left at home to whom he must sometimes pay a visit or send money, other events bring the fisherman home. These are deaths, serious illness, annual ceremonies, etc. Whatever the situation, the migrant remains attached to his origins and returns periodically.

It can be noted, however, that the ties of sedentary fishermen with their place of origin are gradually reduced to the bare essential. This category of fishermen begins to invest in their host country with the purchase of land, construction of a house, etc.

4.4 Conflicts between migrants and the native population

Generally, relationships between migrants and the native population are good or at least tolerable. The few points of friction are centred on fishing and the informal credit system used.

In the case of fishing, problems can be caused by a shoal of fish; that is, who spotted it first and who has the right to capture it. These disagreements sometimes lead to fights and are settled back on land by each group's representatives.

Failure to pay supplies or debts and excessive quest for profit sometimes, if not often, cause trouble between the migrant fisherman and his sponsor, the "fishmammy". This sometimes needs police intervention with seizure and sale of equipment so as to compensate the latter, or the team is obliged to remain with the same fishmammy until the debt has been cancelled. The police also intervene to recover unpaid port taxes (Lome). These raids often result in the confiscation of material until the debt is met and are not at all appreciated by the fishermen, especially the migrants.

5. Migrant fishermen's contribution to the host country

At this point it is appropriate to examine the effects migration has had on the host countries, in terms of micro-economy and economic contributions. One might ask if "the gain is worth the loss"? Unfortunately, lack of information on production and the value of migrant catch does not allow us to distinguish the migrants' part in national production in Benin and Togo.

However, it is to be noted that the impact of migration in host countries is felt in many sectors: fish production, economic and monetary areas as well as technically and socially etc.

5.1 Fish production

With such a high proportion of Ghanaian fishermen in Benin and Togo, it is evident that this activity is essentially in their hands. Their mastery of this skill and their long fishing tradition render them capable of putting to sea in all weather. Their good judgement and able manipulation of nets places their catch among the best when compared to native produce.

Up until the introduction of improved handlines in Benin in 1985 through the IDAF project, this device was and still is largely monopolized by Ghanaian fishermen. Not only are the catches with this type of fishing more suited to town populations, they are also much appreciated.

TABLE 2: Production (in tons) and value (in million FCFA) of line fishing in Benin and Togo

	1985		1987		1988		1989	
	Prod. Value		Prod. Value		Prod. Value		Prod. Value	
Togo	-	-	-	-	134.1	38.2	74.5	28.5
Benin	151.2	25.6	184	92.0	169.4	82.2	-	-

Prod. = Production

Soures: Service de Perches (Lome), Project Modele (Benin)

Although statistics are lacking to differentiate the native and migrant groups in relation to net fishing, this example of line fishing shows the participation of Ghanaian migrants in national production, especially the financial value drawn from it.

This migrant production partially substitutes importation which nevertheless increases steadily in both countries.

5.2 Economic and monetary impact

Through sale of the catch, the migrant fishermen generate great sums of money in the host countries. Nearly half of this money is spent locally on equipment, food and lodging, clothes, etc. On the other hand, a considerable part of this money is directly transferred to their home country, causing economic drain for the host. Transfer of such amounts are brought on by the system whereby the takings are shared out in the home country: in Togo for togolese, in Benin for Beninese and in Ghana for those Ghanaians operating in Togo and Benin.

5.3 Technological impact

To begin with, artisanal maritime fishing was introduced to Benin and Togo by Ghanaian fishermen, along with the appropriate technology. Nowadays the small-scale fisheries in both countries are entirely dependent on Ghanaian fisheries, through the craft and different fishing techniques used, while awaiting an elusive alternative.

However, if at present a certain number of togolese and beninese fishermen perfectly master artisanal sea fishing, it remains necessary for many of them to gain experience in this field. Thus the presence of migrant Ghanaian along the two coastlines allows them to train and perfect themselves "on the job".

5.4 Social Impact

In addition to the diverse matrimonial relationships mentioned above, one should emphasize the strengthened social and linguistic blend brought on by migrating fishermen.

Not only does a common linguistic background in Togo, Benin and Ghana facilitate integration, through the Anlo-Ewe and Gen or Mina, but migration itself reinforce social cohesion in the south of these three countries.

CONCLUSION

At the end of this summary of migrational movements of fishermen in Benin and Togo, a question remains unanswered, namely what would be the level of fish production in the various West African countries if these movements did not exist? In our opinion, the same question applies to other sectors of activity: for example, what would teaching be in the Ivory Coast if there were not important Togolese, Beninese and Burbinabese colonies there? What would the cocoa and coffee production have been in Ghana in the 60s, if there had not been innumerable Togolese and Dahomeans on the plantations at that time?

Examples are many. Without endeavouring to answer these different questions, we would point out that migratory movements, in the fishery sector or others, are only temporary solutions (even though they may last quite some time), allowing certain societies to undergo necessary mutations.

This is why the question of any country's loss or gain, with respects to migratory movements, is difficult to answer. In our opinion, the best we can do is to use the elements one considers positive to promote development in this sector. For example, by using the different groups, their technology and their capacity of adaptation, as agents for experimenting and spreading new fishing techniques in the West African sub-region.

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MIGRATIONS IN ARTISANAL MARINE FISHERIES IN NIGERIA

By Annet IJff

Artisanal marine fisheries in Nigeria: an overview

In Nigeria the artisanal fisheries sector remains the backbone of fish production, contributing an annual average of 96,2 % of the total fish production from 1973 to 1987.

There is very scant literature on the state of the Nigerian fishing industry before the second world war. It is however believed that the artisanal sector has been in existence for many years. The first attempt by the Nigerian government to develop fisheries was prompted in 1942 by the dislocation of imports from Europe due to the world war. The development plan 1970-1974 had the objective to increase domestic fish production for self reliance in its supply. Thus the following plan 1975-1980, set an ambitious production target of 1,2 million tonnes. Total yearly production since 1985 has been less than 300,000 tonnes, representing approximately 25% of the demand of those 1,2 million tonnes. (Tobor, 1990)

The total number of fishing canoes in Nigeria is very difficult to estimate. No clear statistics on this exist. It was estimated by Pollnac in 1984 to be 10,000. These are only powered canoes, as the unpowered canoes include a very large number of small canoes used only for occasional subsistence fishing in brackish water areas. The rate of motorisation for fishing canoes was at that time believed to be high due to generous government subsidies on outboard engines. (Pollnac, 1984)

In Nigeria there are 7 coastal States, Lagos-, Ogun-, Ondo-, Bendel-, Rivers-, Akwa Ibom- and Cross Rivers State. The marine fisheries have developed differently in these states and among the different ethnical groups. Besides the indigenous fishermen there are several patterns of migration of fishermen who are not always of Nigerian origin.

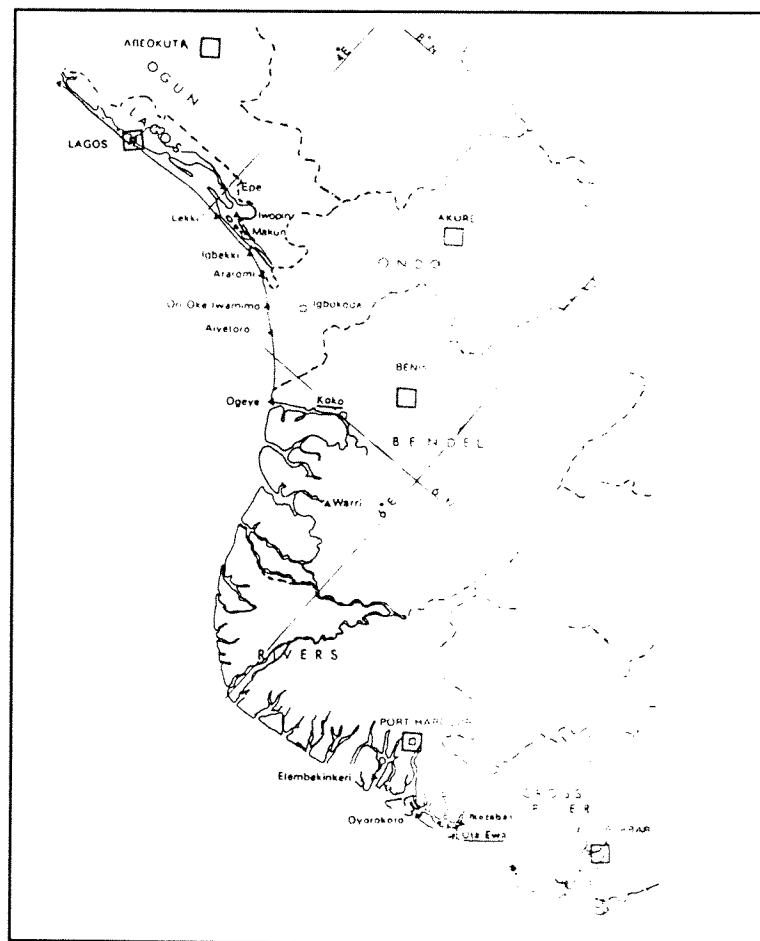
In Lagos State the indigenous Egun (Goun) and Yoruba people have never been very familiar with sea fishing. When the first Ewe fishermen from the Volta region in present-day Ghana and Togo settled down in 1916 in Yovoyan, a village near Badagri, it was them who started fishing at sea using beach seines. A number of these families settled down permanently and integrated with the Egun and Yoruba people. However the Ewe continued to be the owners of the nets and they would go back to Ghana every year to recruit other Ewe fishermen for a contract of one or two years. Still today in almost all the villages between the Benin/Nigeria border and Lagos there are Ewe fishermen who fish at sea, mainly with beach seines.

As Jones pointed out already half a century ago, "There are two classes of fishermen in Lagos; those who fish in the open sea and

As Jones pointed out already half a century ago, "There are two classes of fishermen in Lagos; those who fish in the open sea and those who fish in the harbour and lagoons. The latter are Nigerians (Jekris (Itsekiris), Ijaws and other waterfolk) and their methods are the same as those employed in the rest of the creek and delta area of this country; the former come from the Gold Coast. Their chief settlement is a village called after the founder Akpese and they have other small settlements down the coast as far as Forcados.

Women and children are few, the majority of the fishermen being young men who hope to make enough money to return to set themselves up in their own country". (Jones, 1936)

Nowadays this has changed, if the fishermen have families they take them with them.



Nigeria Coastline

Along the coast from Lagos to Ondo State there are some Yoruba fishermen who fish at sea, but this is not a very widespread activity.

they give part of their catches to them and that they accept to use local intermediates between them and the village. This means that the villagers have gotten extra fish and income from the Fante fishermen which may have resulted in a reduction of fishing activities by the villagers.

In Ondo State the Ilaje people, a subgroup of the Yoruba, turned to fishing, both at sea and in the creeks and lagoons around 1870 when their main source of income, salt production and salt trade, was killed by the importation of European salt. As the marshy type of country does not permit any agriculture, these Ilaje people became completely dependent on fishing. Lagoon and creek fishing did not supply enough fish and income for all the Ilajes so they were forced to go out fishing at sea, which some of them did, or to migrate along the creeks to Lagos, Badagri and even Porto Novo in Benin.

Today the Ilaje are the principal marine fishermen of Nigeria. There are Ilaje settlements everywhere along the seacoast of the country and their catches are impressive compared with those of the other local fishermen. The Ilaje fishermen do also migrate to Cameroon, Congo and Gabon.

In Bendel State and Rivers State marine artisanal fisheries exist but it is not very well developed. The indigenous people of these States engaged in fishing are the Itsekiri and the Ijaw. Both have a tradition of fishing mainly in the rivers and the creeks, though some Itsekiris in particular have taken up the 'banana' boat from the Ilaje and do some sea fishing. Both in Bendel and in Rivers State there are also Ilaje settlements.

In Akwa Ibom and Cross Rivers State the situation is similar to that in Bendel and Rivers State, but here the indigenous people engaged in fishing are the Efik and Ibibio. In addition there are Ilaje and Ijaw immigrant fishermen there and, since a few years ago, Ghanaian fishermen, too. These latter often work for Nigerians who have bought a Ghanaian dugout canoe, nets and an outboard motor and who have recruited fishermen from elsewhere. These fishermen fish for the Nigerian boatowner for a few years and return to their place of origin after the end of the contract.

Different types of migration

As can be understood from the above overview, fisheries have developed in different ways. One of the factors that have influenced the development of the artisanal marine fisheries in Nigeria is the presence of migrant fishermen. The different types of migration observed are as follows:

- a **'Permanent' migration**, where the migrant fishermen stay at a certain place for generations. They are integrated in the

existing community, though they can still be distinguished as a different ethnic group, speaking their own language for instance, as exemplified by the Ewe in western Nigeria.

There are about 1600 Ewe fishermen in Lagos State. They are mainly involved in beach seine fishing and operate 38 beach seines in 19 villages and another 4 beach seines in Lagos (Akpese). Part of these 1600 Ewe fishermen are permanent fishermen, the others are there as contract labourers. They all fish with Ghanaian dugout canoes, bought in Ghana. Outboard engines are seldom used now as they are becoming too expensive for them since the removal of government subsidies in the last few years.

- b **'Semi-permanent' migration**, where the migrant fishermen stay at a place for an unlimited period but with the intention to move further or back to Ghana one day, as the case is with the Fante in Lagos State.

There are about 750 Fante fishermen in Lagos State, who operate 45 Ghanaian canoes based in only two villages, Magbon Alade and Orimedu. The crews, about 15 fishermen on each canoe, use mainly the purse seine "Watsa" and the gillnet "Ali". The canoes are bought in Ghana. Uptil this year, nets and outboard engines were cheaper in Nigeria and therefore bought there, but this is changing now.

- c **Migration on contract basis**, where the fishermen accept a contract for a limited period, mostly one to four years.

There are many Fante fishermen on such a contract in Cross Rivers State, Akwa Ibom State and Rivers State. There are said to be about 400 Ghanaian canoes based in Utan-Brama, Ibeno, Opobo (Down-below) and Bonny. These canoes are almost all owned by Nigerians who realised that the Ghanaian crews operating with purse seines got better revenues than the Nigerians with their gillnets and who thus went to Ghana to recruit a crew and to buy canoes and fishing material. These boatowners are also obliged by the Nigerian authorities to use some Nigerians as part of the crew.

Besides the Fante fishermen, there are also fishermen from other Nigerian states or from Cameroon hired under similar terms. It is estimated that over 3000 fishermen are annually involved in such an arrangement only in Cross Rivers State.

- d **Seasonal migration**, which is widespread in Nigeria. Fishing camps or settlements where fishermen settle down with their families during the fishing season, are very common. As the various fishing seasons are not very distinct, the fishermen may stay in these camps almost the whole year round. However, they do have a home elsewhere. Only in the Calabar local area

there are already said to be 300 of these fishing settlements with together about 150,000 people, families included.

The Fante fishermen from Magbon Alade and Orimedu also migrate seasonally. They say they go to Cotonou (Benin), Lagos, Elefon and Port Harcourt. Elefon is a village at the seacoast 60 km from Magbon Alade in Ogun State. This seasonal migration can last from six weeks to two months. They stay with fishermen from local villages and usually leave their families behind. Two reasons were mentioned for this migration: a) within certain limits they go where they think the fishing is best and b) they go where they can land safely with their canoes.

Reasons for migration

Though every individual may have his own reasons to migrate from one place to another, there are some reasons most fishermen living in the same place have in common.

Looking at the different groups of migrant fishermen in Nigeria, the following reasons for migration can be identified:

a) The Ewe:

The Ewe fishermen came to Nigeria in 1916 from Sèmè (Benin). They left Sèmè because they had difficulties in marketing their fish there. In Nigeria, especially in the areas around Lagos, marketing potentials were assured.

Nowadays, the young Ewe fishermen who are recruited for one or two years contracts come there to save some money. As Nigeria is now becoming more expensive, and as fish prices do not seem to keep pace with inflation, these fishermen do not save as much money as their predecessors used to do a few years ago. Nowadays it is said to be difficult to find people for such contracts.

The other fishermen who come on a contract basis also come to save some money. The contract forces them to live on room and board with pocket money in Nigeria and by the time they finish the contract they can collect the money agreed upon in the contract. This can be a fixed amount of money or a share of the catches over the period they have been fishing. It is obvious that the latter demands more bookkeeping from both the boatowner and the fishermen.

b) The Fante:

The Fante fishermen in Lagos State who operate with their own canoes and who move according to their own ideas, come to Nigeria for financial reasons. They state that the catches have never been as good in Nigeria as in Ghana but that the price they used to get for the fish was better in Nigeria and made it interesting for them to stay there. Besides the better price for the fish, fishing equipment and fuel have always been cheaper in Nigeria.

Fuel is still very cheap, 60 kobo a litre. (1 Naira=100 kobo, 8 Naira=1 \$, on the parallel market 9,5 Naira=1 \$) However, fishing equipment has become more expensive now and the value of the Naira has dropped considerably over the last five years. It is doubtful whether it is still very attractive financially for the fishermen to operate in Nigeria.

c) Internal migrants

Seasonal migration such as that observed among the Ibibio in Cross Rivers State is often due to the natural conditions of the area. People move from their village, which may be a certain distance from the sea, to places where fishing is best or where they can best land with their canoes. In Akwa Ibom State, for instance, one can often find a village and a settlement of the same name at a certain distance from each other. There is Okoroete village in the creeks and 5 km further along the seacoast there is Okoroete settlement. In the settlement the fishermen are living with their families during the fishing season. Most of these fishermen have a more permanent house in the village. As the fishermen have to cross the treacherous surf daily it is important for them to reduce the risk of losses of canoe, engine, gear, catch or all of the above due to accidents which occur frequently during surf-crossings.

The villages are often located at the end of a road, but the fishing settlements are in general very difficult to reach, usually only by boat, an hour or more paddling time from the village. As the fishing settlements are supposed to be a temporary base not much efforts are made to ameliorate living conditions, even though people may live there most part of the year.

Socio-cultural aspects of migration

For the migrant fishermen who move from one place to another not only do working conditions change, but living conditions as well. For instance, although they sometimes take their families with them, at other times they do not. When discussing migration, it is thus important to look at the socio-cultural aspects of it also.

Here again different remarks can be made for the different types of migration. The Ewe fishermen who settled down in the Badagri area in 1916 integrated with the indigenous people. They feel Nigerians now, though they still use their own language and can be distinguished as a separate ethnic group. Examples such as the Ewe fishermen who has been a teacher at the local school and the fact that most of the fishermen have some land near the villages where they grow some cassava, indicate that these fishermen are accepted by the villagers. They dominate the fisheries but they do not seem to compete with the indigenous fishermen,

particularly since nobody locally employs the beach seine. The other side of this complete integration is that these Ewe fishermen do not feel Ghanaians anymore. They pointed out that now the situation in Nigeria is changing and fishing is not so profitable anymore as it used to be, they have been thinking of going back to Ghana, but they do not have a place to go to.

For the younger Ewe fishermen, recruited for one or two years contracts, this situation is of course completely different. They go for a short time and they keep in contact with their hometown. If these young fishermen have a family, they generally take them with them.

The Fante fishermen in Lagos State yet face a different situation. When they arrive in Magbon Alade or Orimedu or even in the villages where they migrate to seasonally, they have to stay with a patron-villager, whom they call their "father". This "father" gets part of the catch and from that part he gives a fixed share to the community.

Besides this, the fishermen are obliged to sell the fish to the women from the village. In spite of this rule they still use their wives as intermediaries. Only when there is fish in abundance are the Fante women allowed to smoke fish. For the Fante women this means that they have lost their incomes from fishsmoking, that is their main income, which also means that they will depend more on the income of their men than otherwise.

When the fishermen migrate seasonally for six weeks or two months, they leave their families behind. In the case of the Fante women from Magbon Alade and Orimedu, this means that they stay behind when their husbands go to Cotonou, Lagos, Port Harcourt or Elefon. These women had to give up part of their work, their income and their freedom to start up other income generating activities, for their husbands to have a better income.

The relationship between the Fante fishermen and the Nigerian villagers is a very delicate one. For both parties the arrangement must be profitable. In the case of Magbon Alade and Orimedu there is no competition between the Nigerians and the Fante fishermen for the resources, the Fante fishermen go farther out at sea and they use different fishing nets such as purse seines.

The situation among the different seasonal migrants as in Cross Rivers State is different again. These fishermen in principle stay in their own environment, they just move some kilometers to the seacoast. They stay in these settlements with people from their own village and they most often take their families with them. The women smoke the fish. In this case the people live under very simple and difficult situations during the fishing season, which can be most part of the year, while they have

better living conditions in their villages. In the fishing settlements the drinking water situation is very bad, houses are temporary palm leave or bamboo huts, malaria bearing mosquitos are all over, and transport to and from these settlements is a problem. For medical care, people have to travel for hours.

Migrations out of Nigeria

Talking about migration of fishermen from Nigeria some special attention should be paid to Aiyetoro, a fishing village in Ondo State, which is an emigration centre of Nigerian fishermen. This village was founded on 12 January 1947 as a religious-utopian community. There are about 8000 Ilaje people living there at the moment, but a number of others have migrated to distant places. Since its foundation Aiyetoro has had a communal social organisation. Although the community has had some internal problems and most of the community owned properties have broken down or are in private hands now, there are still some communal activities. There is a technical school as well as three small communal trawlers. Further more there is communal power supply, health care and a social development committee.

Villagers and the fishermen who migrate from Aiyetoro and earn a private income now still have to pay tax to the village committee. In the past, there were no private incomes, all money earned belonged to the community. Once every year in January the foundation of Aiyetoro is celebrated and all the migrant fishermen come back. At this occasion they pay a contribution for the festival and they pay tax for the communal activities in Aiyetoro.

At the community technical workshop and school for marine engineers, navigators and fishing experts, there are 150 students at the moment, half of them are at the school itself and the other half are getting some practical experience on trawlers. The students stay 4 years at the school. Every year at least 10 women have to be admitted to the school. These women go out fishing after finishing this school. They go to sea and they can work on the trawlers. Nearly 50% of the Aiyetoro fishermen are qualified to work on trawlers. There are still three community-owned trawlers in Aiyetoro. They used to construct trawlers in the village itself.

The fishermen from Aiyetoro have been migrating for a long time but about six years ago there was a particular important wave of migration from the village. It is said that at that time the outboard engines were so cheap (through government subsidies) that most young men could afford a canoe with net and outboard engine for themselves.

Near Aiyetoro it is said to be enough fish but there is heavy

competition from many trawlers fishing in the same waters as the canoe fishermen. The latter thus look for alternative areas where they can fish at sea while not needing to go too far from shore.

The migration from Aiyetoro has been along the creeks towards Lagos and to fishing settlements along the seacoast south of Aiyetoro.

At the moment Ilaje fishermen from Aiyetoro can be found in Bendel State, in Sapele, Warri and Agogboro; in Rivers State in Port Hartcourt (mostly in trawler fishing) and in Opobo (Down Below); and in Cross River State in the area of Oyo. From Down Below the fishermen migrate seasonally to Cameroon in July and August.

The fishermen from Aiyetoro who started going abroad in the forties paddled down to Cameroon and Gabon. There is still an important Nigerian community of about 1150 fishermen from the Aiyetoro area in Gabon. With their families, they may be about 5000. Besides the Ilaje fishermen from the Aiyetoro area there are Ijaw fishermen from Port-Harcourt who migrated to Cameroon and Gabon. They are fewer than the Ilajes; there are about 500 Ijaw fishermen in Gabon, families not included.

Macro-effects of the presence of migrant fishermen

The main effect of the presence of foreign migrant fishermen in the country is on the fishsupply. It is obvious that in Lagos State, for instance, most of the artisanally caught seafish is landed by foreign fishermen. As Nigeria is still far from self-sufficient in fish, this contribution is important.

According to the FAO fisheries yearbook, Nigeria imported about 180.000 mt fish in 1986. The recorded imports are mostly fresh/frozen fish and stockfish (dried cod), but it is generally accepted that tens of thousand tons of traditionally processed fish (mainly smoked and smoke-dried), also enter the country unreported from neighbouring countries.

It is moreover believed that the drastic devaluation of the Naira over the past few years have reduced imports considerably, stockfish for instance is just about inexistent on the Nigerian market now.

The technological impact of the presence of the migrant fishermen in Nigeria is more limited. One would expect Nigerian fishermen to copy the fishing methods used by the Ghanaians in order to land more fish and earn more money than with their traditional fishing methods. This however, is rarely observed. The Nigerian 'banana boats' are not suitable for the heavy nets and the large crews the Ghanaians use. Changing boats and nets at the same time may be too big a change at once and without contacts with the Ghanaians it may even be difficult for the Nigerians to buy a Ghanaian dugout canoe. Nigerian fishermen commented on this

saying that they find the Ghanaian canoes too heavy and that they do not like to go out at sea so far.

Even though the Ghanaian fishermen are clearly better skilled than most of the Nigerians, it does not seem that the Ghanaians have taken over the places of the latter. It is more likely that the Ghanaians started new kinds of fisheries at places where these did not exist before. It is in this light interesting to note that there are no Ghanaians in Ondo State, where the Ilaje people developed sea fishing themselves.

Summary and conclusions

From all the fish landed in Nigeria 96,2 % is landed by artisanal fishermen. No figures are available on what percentage of this is landed by marine fishermen. Hundreds of thousands of Nigerian fishermen migrate seasonally from their villages to fishing settlements. This can be over a short distance, as the Efik and Ibibio fishermen in Akwa Ibom and Cross Rivers State, or over a longer distance as the Ilaje and Ijaw fishermen who move from Ondo and Bendel State to Rivers, Akwa Ibom or Cross Rivers State.

About 1600 Ewe fishermen from the Volta region in present day Ghana and Togo have settled in Lagos State, west of Lagos, since the beginning of this century. They mainly use beach seines. About 750 Fante fishermen have settled in Lagos State, east of Lagos, since 1982. They use the purse seine 'Watsa' and the gillnet 'Ali'.

Another 4000 Ghanaian fishermen mostly employed by Nigerian boatowners, are in Nigeria on a contract-basis.

Nigerians who migrated from Nigeria to Cameroon and Gabon are either Ilajes from Aiyetoro and its surroundings or Ijaws from Port Harcourt and its surroundings.

Reasons mentioned for migration are: a) better income b) possibility to save money c) better fishing conditions at sea compared to the creeks or better sites to pass the surf with the canoe d) not enough fish in the home waters for all the fishermen.

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REPORT ON MARINE ARTISANAL FISHERIES OF CAMEROON,
AND MOVEMENTS OF FISHERMEN

by G.V. Everett

The overall length of Cameroon coast from Nigeria to Equatorial Guinea is about 350 kilometres. There are extensive inlets, estuaries and mangrove swamps so the actual area exposed to the sea is very substantial. Along the southern and central coast there is a road network, but road communications along the coast towards Nigeria are not so good and the area can be described as isolated. The country has a population exceeding eleven million. The capital city Yaounde is inland, but the commercial capital Douala is on the coast.

The economy is well diversified, and infras-structural investment has been sound. Some seventy thousand tons of frozen fish are imported into the country through Douala each year.

The industrial trawler fleet used to catch over 20,000 t annually but recently has been landing less fish as it becomes impossible for Cameroon flag trawlers to fish waters of neighbouring countries, and annual catch is now below 10,000 tons. The artisanal marine catch may be about 30,000 tons annually, made up of 15,000 t of small shrimp (*Palaemon hastatus*) and marine fish. The inland catch may approach 50,000 t (with many Nigerians fishing the Lagdo lake).

A detailed survey of artisanal fishing villages was undertaken in 1983 and 1984 (Njock, 1985). It was estimated that there were 57 main landing points, 6,011 canoes and 18,615 fishermen. An analysis of these data, and some checks, revealed that these data may be underestimates (Samba, 1986). Nevertheless these data (Table 1) give at least an order of magnitude of the artisanal activity in the five coastal zones.

It appears that ninety per cent of the fishermen are immigrants ; mainly from Nigeria, but also from Ghana and Benin. Most fishing is done in Ndian, an area beside Nigeria, where Nigerian fishermen predominate.

Nigerian fishermen are mainly catching fish and shrimp for supply to the Nigerian market. The small shrimp are dried and smoked. Ghanaian and Beninese fishermen are found more in the central and southern coastal zones catching fish for local markets.

About one third of the canoes are motorised. This may seem low, but in fact for much of the fishing in sheltered creeks and mangrove zones the canoes are small and outboard motors are not required.

Fixed, drifting and encircling gillnets are used to catch the fish, of which *ethmalosa* make up a large part. Fixed traps in sheltered areas are mainly used for catching the shrimp.

The government agency set up to promote artisanal fisheries is called MIDEPECAM -Mission de Développement de la Pêche Artisanale Maritime Camerounaise- with a base in Douala and various outstations. The agency sells outboard motors and gear free of tax. No credit is given. The organisation provides these services to well known long standing fishermen regardless of origin or nationality. The core management staff of MIDEPECAM are civil servants. The costs are covered by revenues. About three hundred outboard engines are sold by MIDEPECAM each year. This probably does not meet the demand, so some engines are purchased through normal commercial channels. The power of engines appears to be 15 hp and 25 hp rather than of 40 hp used by fishermen on the non-sheltered coasts of Ghana, Togo, etc.

The Direction des Pêches of the Ministry of Livestock, Fisheries and Animal industries is the government institution with overall responsibility for the sector. The Fishery Research Station at Limbe depends on the Institut de Recherches Zootechniques based in Yaounde.

Table 1 : Numbers of canoes and artisan fishermen

Zone	Canoes	Fishermen
Ndian (near Nigeria)	4 256	14 254
Fako (around Limbe)	432	1 172
Wouri (around Douala)	888	2 030
Sanaga Maritime (R. Sanaga estuary)	233	825
Ocean (near Rio Muni, Eq. Guinea)	202	334
Total	6 011	18 615

Source : Njock (1985)

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Njock, J.C., 1985, Répertoire des centres de débarquement de la pêche artisanale maritime camerounaise. Limbe. Station de Recherches Halieutiques. 58 p.

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Report on Equatorial Guinea, and migrations of artisanal fishermen.

by G.V. Everett

Malabo is the capital city of this country and it is located on the island of Bioco (2,000 km²). The greater part of the country is in Rio Muni (26,000 km²) on the African mainland. Another island, Annobon (17 km²), is found 670 km to the south of Malabo. There are some 350,000 inhabitants of the whole country.

Fish production for the artisanal sector is reported to have increased to 2,000 t in the early 1970's. The activities of Nigerian fishermen at this time may have contributed the greater part of the catch.

In the late 1970's the country suffered serious civil disorder, and many foreign fishermen left, presumably to Cameroon, Gabon and Nigeria. Local fishermen were discouraged from fishing and some canoes were destroyed. Some local fishermen may have left the country. Total fish production probably dropped to below 1,000 t per year.

Since the early 1980's the country has been stable and economic life is slowly gathering pace. In January 1985 Equatorial Guinea joined the CFA zone, which has given investors some confidence.

Statistics on the fishery sector are rudimentary and need to be improved. However it is probable that annual artisanal catch may approximate 2,000 tons. About 2,000 tons of frozen fish may be imported, and foreign flag industrial vessels operating under agreement may catch 2,000 tons per year but landing 200 tons annually in the country. Thus total consumption may be about 4,200 tons p.a.

Villegas (1985) undertook a frame-survey of the canoe fishery in 1985. The results are given in Table 1. There were 2,588 fishermen and 1,130 canoes. There were less than forty outboard motors, mostly used along the coast of Rio Muni by fishermen from Nigeria and Ghana.

It is unlikely there has been much of an increase in canoes and fishermen since 1985 because there has been no substantial fishery development programme. Certainly on the island of Bioco in 1990 the fishing activity is modest. Along the Rio Muni coast there has probably been an influx of canoes from outside the country. Probably there are still less than 100 outboard motors in use.

Apparently there are a few dozen fishermen from Annobon who fish from Bioco. There also are a dozen or so Nigerians who fish from Bioco. Near Bata in Rio Muni there are reportedly twelve groups of fishermen from Nigeria, so probably the foreign fishing influence on the mainland coast is quite substantial. There is no prohibition of foreign canoe fishermen, although they must pay a license free (Table 2).

The type of fishing along the Rio Muni coast is understood to be similar to that found in Cameroon and Gabon. The type of canoe fishing around Bioco is mainly by hook and line and with some gillnets. Beach seining is not common because of the generally rocky (volcanic) shoreline (of Bioco).

Table 1. Approximate number of artisanal fishermen and canoes.

	Bioco	Rio Muni	Annobou	Total
Fishermen				
Occasional	20	14		34
Subsistence	129	55		184
Commercial	226	1844		2070
Total	375	1913	300	2588
Canoes				
Small	161	74		235
Medium	34	659	90	783
Large	0	102	10	112
Total	195	835	100	1130

Source : Villegas (1985)

Table 2. License fees for canoes, per year

	CFA
One man, simple	7,500
Commercial, larger	12,000
Professional, well organized	25,000

Reference

Villegas, L., 1985, Estudio estadístico sobre la pesca marítima artesanal, Guinea Ecuatorial. FAO, Rome, FI: TCP/EQG/4404, 104p.

Migrations in Artisanal Marine Fisheries in Gabon

By Annet IJff

Introduction

Before talking about the migration of fishermen in Gabon, some background information on the country may be useful.

Gabon occupies a rather unique position in sub-Saharan Africa. It is a sparsely populated country which is 85 % covered by dense rainforest with large areas totally uninhabited. The bulk of Gabon's population arrived relatively recently, in the form of separate migrations of mainly Bantu-speaking groups over the last 6-700 years. There are some 50 different ethnic groups who by tradition have pursued more or less a subsistence existence based on hunting-gathering combined with a simple slash and burn agriculture.

Gabon has long been known for its natural resources which include timber, manganese, uranium and other yet to be exploited minerals such as large deposits of iron-ore. However it is the country's vast oil reserves that have a determining influence on the economy and indeed the society as a whole. This is especially the case since the dramatic price increases of crude oil in 1973-1974 which almost overnight made Gabon one of the wealthiest countries on the continent.

The year 1986 has also been a turning point in Gabonese economy and society. The collapse of world oil prices caused the balloon to burst, the years of seemingly limitless growth suddenly came to a halt, and radical economic cutbacks have had to be made ever since. From 1985 to 1986, the value of the GDP fell by 29 % and a further 14 % from 1986 to 1987. A drastic economic readjustment programme drawn up in collaboration with the IMF has been introduced, and public spending has had to be reduced significantly.

The "oil shock" has also led the Gabonese authorities to focus once again on diversifying the economy and not the least encourage domestic food production. Boosting domestic food production, however, will not prove easy, for several reasons. For one, there has for decades been a steady migration out of the rural areas to the main cities, Libreville and Port Gentil. Secondly, agricultural techniques have changed little over the years and crop cultivation is largely on a subsistence level complemented by some hunting, fishing and gathering of wild fruits for domestic consumption. The production of any surplus crops for sale is further discouraged by poor road infrastructure and the virtual absence of an internal marketing structure for such products, even on a traditional level.

The prospects for increasing domestic fish supply may be somewhat brighter. Both marine and inland resources appear largely underexploited and the presence of highly skilled artisanal

fishermen in the marine sector is a definite plus, though the fact that most of these fishermen are foreigners can prove to be a thorny political issue.

For the inland fisheries, the poorly developed marketing structures, coupled with inadequate preservation methods, will probably continue to contain any major expansion of the sector. In addition, artisanal fishermen here are limited in numbers and less skilled than on the coast.

The exploitation and volume of catches in the marine sector of Gabon's fisheries continues to be more or less on the same level as it has been the last few years. Production figures of 12-13,000 tons tend to be used in estimating artisanal maritime production, which is below the official figures.

Industrial fisheries account for some 8,000 tons of fish landings (in addition to 1,600 - 1,700 tons of shrimps). Fishing boat owners, who are also running most of the cold stores in Libreville, claim that they make more profit through importing fish rather than from fishing.

Imported frozen fish is sold on the market for 500 FCFA a kg, while the price for fish landed by artisanal fishermen is already at least 500 FCFA a kg at the landing site.

Imports of fish continue to be at a high level, thanks also to the taste urbanized Gabonese seem to have developed for high quality species and products. Imports amounted to nearly 15,000 tons in 1985, but was partly offset by the export of some 1,500 tons of shrimp and 5,500 tons (FWE) of artisanal caught smoked small pelagics.

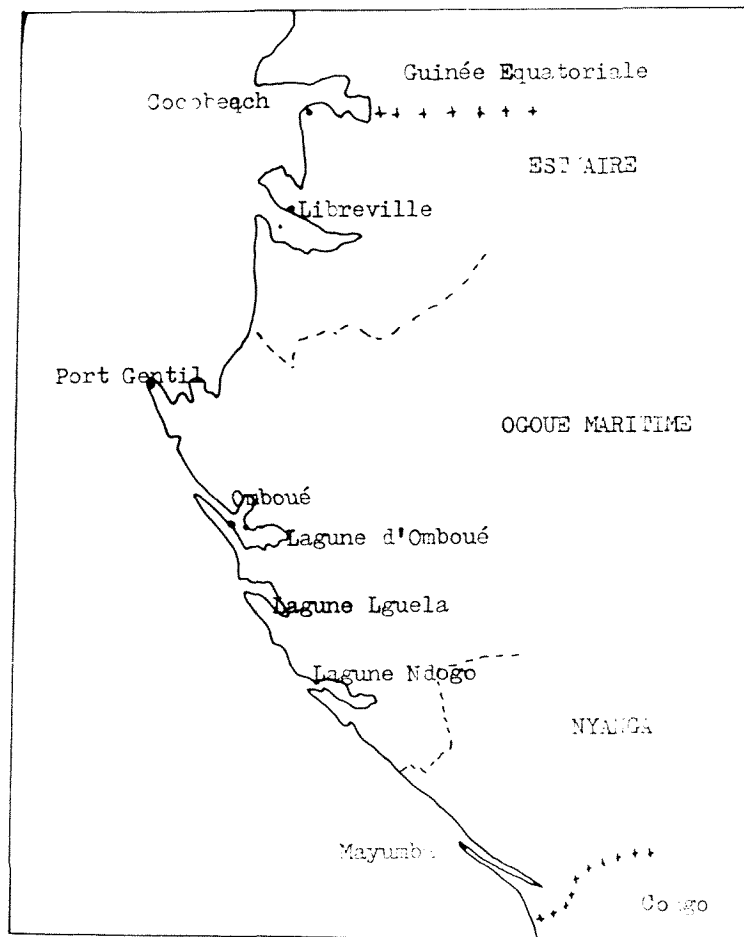
The fish consumption levels in Gabon are very high (among the highest in the world) at about 30 kg per capita.

Historical overview artisanal marine fisheries

There is almost no maritime fishing tradition in Gabon, only two of the around 50 ethnic groups have ever engaged in any marine activities. These are the Benga, originally from the Cap Esterias area and the Vili of the southernmost part of the coast and who are better known for their fishing activities in Congo. These two groups, with perhaps a few Oroungou from the Port Gentil area, have traditionally engaged in subsistence fishing with simple handlines in shallow water and seem to have progressed little beyond this.

By the 1850ies the Gabon estuary had become a focal point of French colonial interests, of both Protestant and Roman Catholic missionaries and of British traders.

At that time the most important hand-made implement, indispensable for hunting, fishing, trading, warfare and communication between the villagers was the canoe. Some sources (Linschoten, 1934; Hutton, 1821; Boteler, 1835) suggested that the M'Pongoué canoe was the first that they had seen along the coast hollowed out of a single log. The dug-out of Wassango/Duke could hold more than 200 men. Some were over thirty feet in length and had a capacity of eight to ten tons—craft quite capable of carrying out trade along the coast from Cameroon to Cap Lopez. (Bucher, 1936).



Gabon: the three maritime provinces

In a 1906 report it was written that the inhabitants of the coastal villages do fish at sea, but not regularly. Only in Libreville and Loango were professional fishermen found. In the area of Libreville the M'Pongoués, the Boulous and the Bongo (Benga) people were the fishermen. South of Cap Lopez till Mayumba the indigenous people did not fish at sea, because of the dangerous surf they had to pass.

The fishing canoes were small, manned by four fishermen using paddles or a square sail. The dugout canoes were made from several different types of wood, but preferably the 'Okoumé'. Locally made nets and lines are used as well as castnets that were introduced by the Europeans.

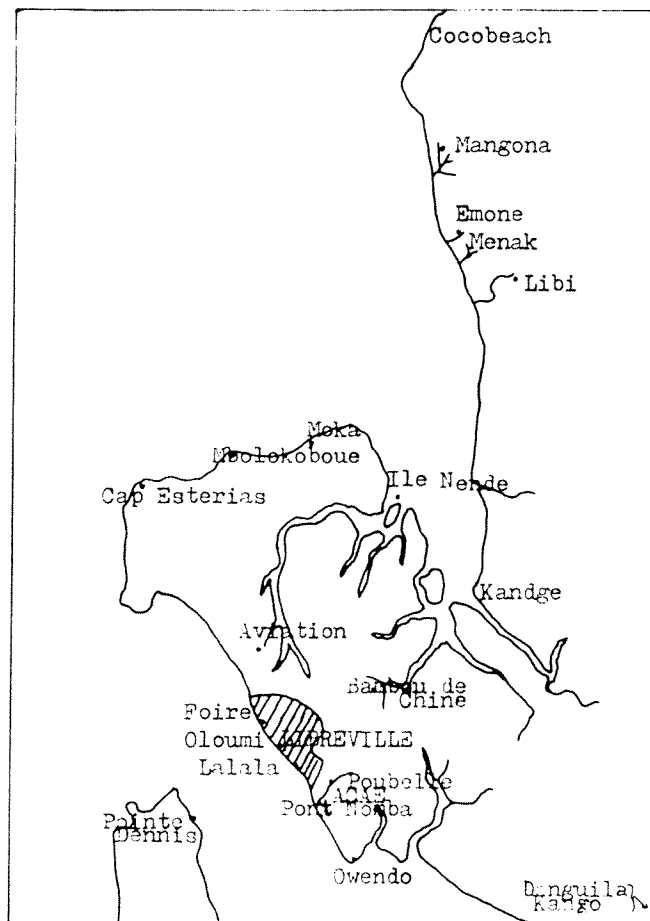
Mulletts were commonly captured at the sandbanks. (Darboux, 1906)

The first migrant fishermen from Nigeria and Togo came to Gabon from 1949 and 1952 on.

Migrant fishermen

The term migrant fishermen in this paper is used for fishermen with nationalities other than Gabonese who are involved in fishing in Gabon for a longer or a shorter period.

Even though some of these fishermen are born in Gabon and may thus have the Gabonese nationality as well, they are referred to as Nigerian or Beninese fishermen after their fathers' or grand fathers' origin.



Gabon: Landing sites in the Estuaire province

As stated above, the Gabonese are hardly involved in marine fishing, and if they are, they stay at their place of origin and go out fishing to get fish mainly for subsistence. About 13 % of the marine artisanal fishermen are Gabonese.

Since about 1950 foreign fishermen have started coming to Gabon, particularly to Libreville and Port Gentil where most are still concentrated.

Table 1 gives the number of fishermen and their nationality in the Estuaire province, i.e. the Libreville area. There are 2613 fishermen of which 61,8% are Nigerians and 15,3% are Beninese, together 77,1% .

Table 1: Census of maritime artisanal fishing settlements in the Estuaire province.

sites-villages	number of fishermen					no fishing nets				% captures	
	N	B	GAB	GH	D	canoes	BSN	SMG	RN lines	DF	ETMA
Cocobeach	100					30	12	2	10	95	5
Mangona	80					20		20	5	10	90
Emone Menak	15					5	1	5		15	85
Libi			10			4		5	5	50	50
Kassotte	55					15		5	10	15	85
Mlambie					10	10	1	1	10	90	10
Kandge	90		25			35	20	15		50	50
Ile Nende	40					15	5	5	10	95	5
Moka			35			10	10	5		80	20
Mbolokoboue					40	12	15	1	2	95	5
Cap Esterias			50		25	20	15		10	100	
Aviation	155	25	2			45	35	20		60	40
Bambou de chine		50	10		15	30	10	25		30	70
Foire			30		10	20			40	100	
Oloumi			25		125	30	10		30	95	5
Lalala		90				25	15	10	2	35	65
Acae / Glass	3	65	15			25	28		2	75	25
Pt Nomba	150	160		45		100	53	50	18	25	75
Poubelles	490	10	20			160	15	20		10	90
Owendo	425					110	105		65	95	5
Akouknan			15			5	2	5	5	95	5
Pte Dennis			15			8		2	5	100	
Donguila			45			15		30	5	70	30
Kango			16			3					
Atokou			15			5		5	5	90	10
Ozonga	12					3					
Total	1615	400	328	45	225	760	352	231	32	214	
Total fishermen			2613								
partition %	61,8	15,3	12,6	1,7	8,6						

N:Nigerians; B:Beninese; GAB:Gabonese;
GH:Ghanaians; D:Divers
BSN:Bottom setnet; SMG:small mesh gill-
net; RN:Ringnet; DF:Demersal fish;
ETMA:Ethmalosa ("Sardines")

source: La pêche maritime artisanale dans l'estuaire du Gabon.
Working paper. (Comité Régional des Pêches, 1990)

In the Port Gentil area there are four fishing settlements with foreign fishermen:

Cap Lopez	160 Togolese fishermen	60 canoes
Matemba	350 Beninese fishermen	110 canoes
Lip	300 Beninese fishermen	100 canoes
Rinicongo	250 Beninese fishermen	80 canoes
total	1060 migrant fishermen	350 canoes

The Nigerian fishermen living in Owendo and on Ile Nende are Ijaw people coming from Port Harcourt and its environment. The other Nigerians are Ilajes and they claim all to come from Ugbo Nla, a village ten minutes from Aiyetoro in Ondo State. Aiyetoro was founded in January 1947 as a religious utopian community that since its foundation had a communal social organisation. Ugbo Nla may be founded by people who left Aiyetoro.

The fishermen still use the same fishing technics as they were used to in Nigeria. The Ijaw fishermen use mainly bottom setnets, the Ilaje use mainly smallmesh-gillnets for "sardines" in combination with some setnets.

The Nigerians all have canoes constructed in Gabon, mainly small dugouts built up at the sides with planks.

The Beninese fishermen in Gabon are Popo (Plah) or Pedah from Ouidah and Grand-Popo. They also keep on using the same fishing techniques as in Benin.

They use Ghanaian dugout canoes, which they still buy in Ghana. The canoes are then brought to Cotonou where they are put on a freighter to Gabon.

In Gabon they cut off the back of these Ghanaian canoes in order to make it possible to put the outboard engine in the back of the canoe. Only in the case of the canoes using the purse seine do they not cut off the back.

The "Togolese fishermen" are actually Ewe from the Volta region in Ghana. There are four chiefs who stay in Cap Lopez (near Port Gentil) already for a long time. The first of them arrived in 1952 in Gabon. They mainly use beach seines. Though the use of beach seines is since 1983 officially prohibited in Gabon, the group of "Togolese" fishermen in Cap Lopez is more or less allowed to keep on using them.

There are since a few years also some other Ghanaian fishermen in Gabon. They are employed by the Beninese fishermen for fishing with purse seines.

These Ghanaians are in Gabon as contract labourers and they come mainly from Accra.

The 225 fishermen from the group 'divers' in table 1 are mainly from Sao Tomé and Príncipe. They are working on contracts for Gabonese boatowners. They have been fishing in Gabon for about ten years now.

They are not integrated in the Nigerian or Beninese fishing camps but operate from separate sites. They use mainly fibreglass canoes constructed in Gabon.

They fish with lines and they always use ice, the fish is then sold fresh.

Almost all the small Pelagics caught by the artisanal fishermen, 40 - 50 % of the total catches, are bought by Cameroonesse traders and exported to Cameroon.

Among all fishermen met in Gabon the use of Kerosene outboard engines seemed to be common. When looking at the prices of fuel this can be understood; a litre of petrol costs 330 FCFA, a litre of kerosene 80 FCFA. Though there is a discount on the price of diesel for the industrial fishing boats (160 FCAF a litre), the artisanal fishermen do not receive any similar rebates for petrol.

For credits the foreign fishermen depend on the private sector. An enterprise giving credit to the fishermen is Promopeche. They give loans upto 100,000 FCFA, which have to be paid back in four months. During the time the fishermen have a loan with Promopeche they are obliged to sell a certain amount of their high value fish to the company which then exports it. Over the last two years for more than a 100 million FCFA loans were given with a 100% repayment rate.

Another possibility for loans is the Yamaha dealer in Libreville.

The most common sharing system used by the Nigerian fishermen is to keep two parts for the boatowner and to divide the third part in equal shares for the fishermen.

The Beninese fishermen using the purse seines also use this system, two parts for the boat and net owner and the third part for the fishermen.

The Beninese fishermen using gillnets divided the revenues in two, one part for the boatowner and one part divide in equal shares for the fishermen.

All the fishermen fishing in Gabonese waters are supposed to have an authorization for fishing which costs 100,000 FCFA a year or 25,000 every three months. Besides the authorization they have to pay 20,000 FCFA a year to register their canoes and when they want to import a new canoe they have to pay 200,000 FCFA tax.

For 2000 FCFA they can get a fisherman's card which can be carried along as a kind of passport.

In principle the fishermen should not have any problems while fishing in Gabonese waters once they have paid all the required fees, but not all the boatowners comply.

The fishermen complain that fishing has gone down over the last four years. One boatowner used to have 12 canoes in operation of which only one is left now, another went back from 6 canoes to one.

In the "good days" a canoe was said to come back with 800 - 1000 kg fish, now it is common if they land only 20 kg, but there are no data to confirm these claims.

Reasons and motives for migration

Though the fishermen have had different reasons to come to Gabon, they have all come with the idea to get a better life there, or more precisely to get more money there than in their home countries.

Some of them came for other jobs, one fishermen met originally came to Gabon to work for a construction company, another came as bookkeeper, yet another one had finished two years at university studying English and was looking for a job.

They all come from fisherman's families but they do not necessarily have experience themselves in fishing before coming to Gabon. After a certain time in Gabon they have found out that they can make more money with fishing than with the other jobs.

Besides getting more money, the possibility to save some money was mentioned several times as reason for migration. This can be because they are working on a contract and get their money at the end of the contract, but it was also mentioned among the Beninese that at home with the whole family around, there are too many obligations. If you have some money, family members in need will come to you for help and it will be very difficult to refuse.

Some of the fishermen coming from Grand-Popo in Benin remarked that there is not enough fish in their home waters.

Another remark made as a reason for migration was that they moved out of curiosity, having heard stories about Gabon from other fishermen from their village.

Or as one of the villagers said, "pour se promener un peu, quand on reste en place les idées restent en place aussi".

Another fishermen told me that he went to Japan on holiday three years ago. As he knew that most fishing materials come from there he wanted to have a look there himself.

Migration patterns; migrants or immigrants

The migration pattern in Gabon is rather universal. There are

different settlements of fishermen from different nationalities but in all those settlements there are a number of fishermen who have settled down there permanently, most of the times the boatowners. They work with crews from their home country, who come to Gabon as contract labourers. After the contract has finished these fishermen can decide to go back to their country or they can stay and try to get a boat for themselves.

Seasonal migration does not seem to exist in Gabon. A closer look at the different fishing settlements over the last 40 years gives the following migration patterns;

There is only one settlement with Togolese fishermen. The chief of this settlement came to Gabon, Libreville in 1952 as a bookkeeper. In 1955 he started fishing with a Gabonese crew. He settled in Cap Lopez in 1971. Once he got his fishing authorization in 1974 he started recruiting fishermen from Togo, because he said "The Gabonese crew was seasick all the time".

The first Beninese fishermen appear to have settled in Matemba (Port Gentil) and Cocobeach in 1962. From 1965 on, some of them moved to Libreville where they settled in Pont Nomba and ACAE. In 1978 all the Beninese were sent home due to political problems between Gabon and Benin. When the fishermen started coming back from 1979 on, they settled besides their former settlements, and also in Lalala, a former Nigerian landing beach in the centre of Libreville.

The first Ilaje fishermen say they came to Gabon in 1952. A group of five fishermen left Nigeria in 1949 and paddled down first to Cameroon and later to Gabon. They arrived first to Cocobeach. Over the years more Ilaje fishermen started coming. From 1958 they started moving farther. First to Mangona and later to Libreville where they settled at the settlements BTI and Lalala. The Ijaw fishermen from the Port Harcourt area came first in 1958 and they settled in Owendo.

In 1967 most of the Nigerians went back to Nigeria in relation with the Biafra war. The group of fishermen that stayed in Cocobeach went to Equatorial Guinea as refugees. In 1972 they all came back to Gabon where they were accepted as refugees and got some help in putting up their settlements. At that time they were first all sent to Aviation. The Ilaje fisherman who arrived first in Gabon in 1952 became the chief of this settlement.

From Aviation the fishermen started moving back to the settlements where they used to stay before leaving the country. The Ijaw fishermen went back to Owendo, but a small group of them left Owendo to settle at Ile Nende. The Ilaje fishermen moved besides the former settlements also to Grand Poubelle and Petit Poubelle.

Still today the chief of Aviation is the overall chief of all the Nigerian fishermen in Gabon.

Socio-cultural aspects

The migrant fishermen in Gabon live in the remaining areas of the big cities. Though at first glance the settlements may look rather shabby, in general the living conditions are better there or equal to that in the different home regions of the fishermen.

One of the main problems is that the fishermen can never be sure whether they can keep on staying there or not. At the time of the interviews for instance, the fishermen of Pont Nomba area are told that they have to leave their area as one of the ministers wants to put up a new industrial complex there. This means that the fishermen are forced back to the more remote areas.

At Owendo, the day before my visit, part of the village was razed to the ground. Obviously here also the villages were warned, but as they had nowhere to go they could not do much. Due to the erosion the fishermen had started constructing houses closer and closer to the railway. The railway company became afraid of accidents and warned the villagers to keep a distance.

In general the people live in the different settlements according to the rules and habits of their home region. Food habits, religious habits, the way the women smoke the fish, etc. all refer to their original culture.

The Ilaje people for instance have taken their Cherubin and Seraphim Church with them. Priests educated in Nigeria organise regular prayers and services. Though the religious background of the Ilajes in Gabon is the same as that of the people in Aiyetoro, in none of the settlements in Gabon do they live or have lived according to the communal social organisation that has been common in Aiyetoro for a long time.

From Aiyetoro in Nigeria it was learned that every year in January the foundation of the village is celebrated and that at that occasion most of the migrant fishermen come back and that they then contribute to the festival and give a contribution for the community activities.

In Gabon most of the Ilaje fishermen said indeed that they go back in December. Even if not all of them go, they send a representative. In Gabon the fishermen did not talk about a financial contribution, in contrast to the Beninese among whom it was mentioned several times that they used to send money regularly to their family in Benin. This does not necessarily mean that there are no Nigerians who send money home, after all only a limited number of fishermen was interviewed.

In general, the migrant fishermen in Gabon must be said to have migrated permanently. They are happy with their lives in Gabon and want to stay there. A few times it was mentioned that they may go back once they retire, but in that case they would leave sons behind to take over fishing.

Migrant fishermen, the problems they face

One of the problems the migrant fishermen face is that they are allowed to fish only at sea and only in the Gabonese waters. As soon as they come in the estuairies where the Gabonese fishermen use to fish, they have difficulties.

It was also mentioned that it was dangerous for them to go into the waters of Equatorial Guinea. Some fishermen reported that they have lost several outboard engines that way. Coming in their waters they are stopped by soldiers who confiscated their outboard engine and or canoe. Near Cocobeach it is sometimes difficult to tell what belongs to Gabon and what belongs to Equatorial Guinea.

Another danger for the fishermen is armed robbery at sea. Over the last year more than 150 outboard engines have been stolen that way.

It was suggested that this is done by Nigerian petrol smugglers. They were said to be individuals with no relations to the Nigerian communities in Gabon. The Nigerians even feel embarrassed to be brought in connection with it. According to the Nigerian chief, the punishments are not strong enough in Gabon, "had it been in Nigeria we would have known what to do with those criminals". On the other hand, the Nigerians are afraid of the robbers themselves and do not want to say too much.

Macro economic effects

The main effect of the presence of foreign migrant fishermen in Gabon is on the fish supply. With 85 % of the artisanal marine fishermen being foreigners, this should be clear.

However, the nutritional impact for Gabon will be less than one would think as almost all the pelagics are exported in a smoked form to Cameroon. This is about 5,500 tonnes (FWE), 45 % of the annual catches landed by artisanal fishermen in Gabon.

Besides the fact that fresh fish may be preferred to frozen fish, there is not much advantage for the Gabonese consumer to buy local fish as the imported frozen fish is sold at the market for the same price or even cheaper as the fresh high quality fish

landed by the artisanal fishermen.

Technological impact of migrant fishermen

The technological impact of the presence of the migrant fishermen in Gabon is limited. The different groups of fishermen stay with the fishing techniques they are familiar with and do not seem to transfer it to local fishermen.

Even if they are aware of new developments as the case with the purse seines, they prefer to employ Ghanaian fishermen who are familiar with this technique, instead of trying it out themselves. On the longer run in this case there may be an impact as the crew will consist of both Ghanaian and Beninese fishermen.

Summary

The marine artisanal fishermen in Gabon have the following composition: 15% are Gabonese, 60% are Nigerian and 15% are Beninese. The remaining 10% are fishermen from Togo, Ghana and Sao-Tomé and Príncipe. The Sao-Tomean fishermen mainly work for Gabonese boatowners.

The Nigerian fishermen come from two different areas in Nigeria. About 30% of them are Ijaw and come from the Port Harcourt area in Rivers State and about 70% are Ilaje and come from Ugbo Nla a village near Aiyetoro in Ondo State.

The Beninese are Popo (Plah) or Pedah and all say to come from Grand Popo. This means that they came to Gabon due to relations with people from Grand-Popo who migrated in the sixties.

The Ghanaians and Beninese use Ghanaian dugout canoes which they buy in Ghana. In Gabon most of them cut off the back to be able to put the outboard engine at the back.

Most fishermen in Gabon use outboard engines on kerosene due to the difference in price between petrol and kerosene.

The fishing was said to have gone down over the last five years.

Reasons for migration are better incomes abroad, better possibilities to save some money, better fish stocks and curiosity: they want a change in their lives.

The presence of the migrant fishermen today can be traced back to the arrival of an Ewe from Togo who came to Gabon in 1952, an Ilaje fishermen from Aiyetoro who also came to Gabon in 1952, an Ijaw fishermen from Port Hartcourt who came to Gabon in 1958 and a Popo fishermen from Benin who came to Gabon in 1962.

Since their stay in Gabon they have attracted relatives and fellow-villagers from their home towns to join them.

An extra impulse was given to this for the Nigerians after the Biafra war. The fishermen who had come back from Gabon to Nigeria in connection with the war went back to Gabon in 1972. For the Beninese there was a similar situation in 1978 when the fishermen had to leave Gabon due to political problems between Benin and Gabon. After a short stay in Benin the fishermen were allowed back in Gabon.

The problems the migrant fishermen face are that they can never be sure to be able to occupy the ground where they have their settlements, from one day to another someone may come to annex it.

Besides this the fishermen mentioned that they sometimes have conflicts with Gabonese or Equatorial Guinean fishermen as they are fishing in their waters.

For all the fishermen robberies at sea is a threat.

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FISHERMEN MIGRATIONS IN THE CONGO:*

The so-called "Popo" fishermen

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CENTRE ORSTOM POINTE NOIRE.

The question of Fishermen's migrations in Congo is particularly characterized by the coexistence of two categories of fishermen: the "Vili" and the "Popo". The first takes its name from the linguistic and cultural group settled on the congolese coastline where more than 90% of the fishermen assimilated actually originate. The others originate in Cabinda and therefore have a similar cultural background to that of the Vili. The second category, the Popo in particular, come from Benin, Togo and Ghana. This study concerns this migrant population in the context of aritisanal maritime fishing in the Congo.

The history of Popo fishermen migrationsOrigin

The settlement of Popo fishermen in Pointe Noire is interwound in the global migratory context of West African nationals, observed in the Congo in the 1930s. If one considers the usual designation used there, these movements concern the "Senegalese" and the "Popo". The first originate in Senegal, Mali, Niger and Guinea. They are mostly moslem and own grocery shops in and around the markets. The second are Dahomeans, Ghanaians and Togolese, grouped together under the title "Popo" with respect to the Grand Popo area (in south west Benin), a certain number of them effectively originating there and presented themselves as such to the first Congolese met. They are christian and often sell general hardware, cooking utensils, beauty products, fritters, etc., on stalls in the different makets.

Fishing was not the main occupation of these early immigrants. It was not until Koblavi, a Ghanaian merchant, took the iniative in this direction in the 1940s. He introduced the first Ghanaian type canoe on the Congolese coast, which he brought from Ghana along with the necessary equipment (beach seine). The use of this material was entrusted to one of Koblavi's close relatives, brought to Pointe Noire for that purpose. The crew was completed by Vili fishermen. The fact that this foreign fishing unit was accepted by the native fishermen encouraged the arrival of other Popo fishermen.

* Translated from French.

Migratory evolution

The Popo fishermen were originally few in number. However, their activity was remarkable in spite of this. In 1950, Charles Roux was appreciative of the results obtained by these fishermen using beach seine. Five years later, Rossignon (1955) emphasized the performance of three "Popo canoes" in Pointe Noire using drift nets.

The first increase in Popo fishermen was noted in the beginning of the 1960s (VENNETIER 1958). A count carried out by DHONT (1963) revealed that this colony was made up of 65 fishermen in 1962, 10 were Dahomeans, 20 Togolese and 34 Ghanaians. This growth was interrupted early 1962 by measures taken to expel illegal immigrants. The colony underwent further rapid expansion towards the end of the 1960s to a total of 470 fishermen in 1976. However, this growth was affected once again by new measures against it in 1977.

The migratory movements were reestablished in 1979, though without reaching the 1977 figures, these were met in 1982. In 1983 and 1984, the arrival of large numbers of new immigrants greatly increased the population. With these new recruits, the Popo fishermen's force doubled in three years, from 500 in 1982 (CHABOUD) to about 1000 in 1985(1). This population has remained stable in recent years.

Motivations

In spite of the expulsions in 1962 and 1977, the migratory flow was maintained. Questioned about this, certain fishermen pointed out the restrictions reigning in their own country. This is particularly the case of Benin, where the large numbers of fishermen lead to great competition, causing poor output and non-remunerative prices. Thus, fishing is not profitable in their native country. These fishermen mention information received on relatively better fishing conditions in the Congo, spread by the first immigrants upon their return, after at least two years' absence, with one or two million francs CFA in their pocket. These success stories encourage them to try to do likewise.

1)* Figures obtained from the general secretary of the colony, which correspond more or less with the number of Popo fishermen (962) registered the same year at the Services de la Marine Marchande (merchant navy services).

2. Popo fishermen and their equipment

POPO FISHERMEN

The present immigrant fishermen population stands at about one thousand. If at the beginning of the 60s the Ghanaians were the more numerous, this is has not been the case these last few years. The distribution per nationality indicates that the Beninese presently represent 95% of the population. They are generally of the Pla and Pedah ethnic groups, from the sandy over-populated peninsula of Aoloch-Gbeffa near Grand Popo (JORION 1985).

Studies by CHABOUD (1982) and MAKAYA (1983) show that almost 70% of Popo fishermen are over 35 years of age; the average age is estimated at 45 and the youngest fishermen are at least 25 years old. (fig.2)

The absence of young fishermen can be explained by the need to dispose of sufficient savings before undertaking large-scale emigration. A certain number of fishermen generally arrive in Pointe Noire after having fished in their own country and in others along the West African coast (Ivory Coast, Liberia, Gabon, etc.)

The Popo fishermen have not settled elsewhere along the Congolese coast apart from the two villages on the beaches of Pointe Noire, which they share with their Congolese colleagues. Their houses, built of planks and covered with corrugated iron sheets, are separated from each other by fences built with diverse recuperated material. They define the limits of an inner courtyard that shelters a certain number of smoking ovens. Once settled in the village, a good many of the fishermen are joined by their wife and form sizeable households when one adds the children. The latter are generally born in Pointe Noire or come very young with their mother. The population also has a high proportion of bachelors. (MAKAYA 1983)

The equipment used

This has undergone considerable modification in quality and in quantity. The craft are "Ghanaian-type" canoes usually called "Popo canoes" in the Congo. They are built in Ghana and transit through Benin before arriving in Pointe Noire by cargo. The first canoes observed by ROSSIGNON in 1955 were not as long as those used presently. GOBERT (1985) remarked that the average length of the "Popo canoe" has grown from 8m in 1955 to 9,30m in 1973 and 11,35m in 1981. At first it was manoeuvred by 8 paddlers but this force was replaced in the 60s by a 25CV outboard motor. The last census refers to 158 Popo canoes in Pointe Noire in 1989.

The fishing gear used is varied: drift gillnets, bottomset

gillnets, beach seine and occasionally handlines. The beach seine was the main device favoured by the first generation. It was gradually abandoned for the sardinella drift net. This specialization is displayed by the length of the nets used: 120 to 150m in 1955 (ROSSIGNON), 150 to 400m in 1972 (NIEM), 500 to 700m, even 1000m nowadays. The pieces forming these nets are about 100m long, their depth varies between 10 and 12m and the mesh size can be 30mm. Sardinelle fishing is the sole activity in the cold seasons (May to September and to a lesser degree, December to January). The other gear types are used the rest of the year; beach seine, for coastal pelagics (Caranx, horse mackerel) and other fish, and the set nets also used in great lengths (about 1000m long). Figure 3 shows the distribution of the fishermen's outings, per type of gear, in 1987.

3) Economic and social organization of the Popo community

Two kinds of institutions are to be found, the "company" and the "community".

The "company"

In the first case, the term denotes the unit as property of a group of 2 to 7 fishermen who own collectively the means of production, which they exploit in common and receive an equal share of the takings. Secondly, the term "company" may represent an individual concern where the means of production belongs to one head fisherman, the crew being remunerated separately. Collective ownership is the most frequent amongs the Popo (37 out of 41 "companies" listed by GOBERT in 1985).

The companies are generally created in the country of origin. The ways and means by which equipment is bought varies; the funds may be personal savings invested in common, or a group loan from a private individual. The members are often associated through family relationships, the meaning of the word family extending far enough a field to include "ethnic" and village ties. The same principle is employed to recruit the crews. The company "leaders" bring them in from their native country. The money for the trip can be advanced by the "company" should the founding members judge it appropriate; otherwise the applicant must dispose of sufficient savings to cover his travel expenses. The distribution of earnings, which varies with the type of device used, portrays the ways in which the company functions.

With the drift nets, the takings are shared at the end of the week. The first step is to deduct common running costs (petrol, oil, food allowance, etc...) from the lump sum, the remainder being divided into two equal parts: one for the company, to supply the group savings account and partly used for repairs and replacing equipment; and one for the crew, shared fairly among the fishermen members, including those who may not have taken

part in different outings. Bonuses from 1000 to 7000 FCFA and from 500 to 6000 F are also provided for the head crewman and motor operator.

With the purse seine, the distribution of shares is not the same as the nets do not belong to the company but to the fishermen themselves. The rules in force recommend that each fisherman sells his own catch and reimburses his fair share of the running costs (petrol), canoe and motor rental fees.

The economic and social implications of company organization have been enumerated by CHABOUD (1982) and GOBERT (1985). They are as follows:

- co-investment
- a certain part of the capital's income is not immediately available, thus forming "forced savings" to use CHABOUD's term;
- group management, under the company leader's authority, of this "forced savings",
- partial posting of the "forced savings" to investment costs.

The company system thus encourages capital accumulation. Another observation relative to the functioning of the company is connected with the fact that the remuneration is the same for all. The company members therefore dispose of the same amount for general household expenses, which maintains the group's homogeneity. In addition, the "forced savings" and recruitment based on family ties are factors contributing to cohesion within the company whose members seem strongly bound, separations being rare.

From this point of view, the fishermen perceive the company as a protective structure against the risks pertaining to the conditions of expatriation in which they live in the Congo. The desire to protect oneself and one's capital is reinforced in the "community" organization.

The "community"

The term "community" when referring to Popo fishermen is often mistaken with "colony" or "population" in existing texts. However, it suits our purpose better than others in that it emphasizes the privileged exchanges binding the members of the same group. All the Popo fishermen are part of the community, in the heart of which the economic and social life of the group takes form. It is an informal institution. Adhesion is not part of a formal or restrictive procedure, but spontaneous incorporation pertaining quite simply to the fact that they are Popo fishermen. It would appear the affinities created by common origin and prospects in life generate this informality. This was the case until it gave way to the institutionalized role assigned to the community in the 1970s.

Regulations comprised of 11 articles were adopted in this perspective. Respect of the regulations is enforced by the head of the community and his deputies. Analysis of these regulations points out two main objectives: social and economic protection and mutual respect. The first is expressed in the case of crews in distress, illness, death etc... Should a crew find itself in difficulty at sea, a search is carried out by at least 10 boats; fishing is interrupted until all have been found. Should a member die, the group savings account takes care of all costs - funeral, wake-keeping and repatriation of the body. The group savings account will also support the travel expenses of a seriously ill man, enabling him to return to Benin with his wife and children.

The regulations fight conflicts and encourage solidarity, unity and cohesion within the group. The head of the community, apart from his specific prerogatives as such, represents the Popo fishermen with respect to the Congolese authorities (fishing administration, merchant navy services, local associations, etc.)

The community also favours the integration of other activities connected with fishing. It maintains the link between supply and marketing of the catches by the women. It must be recalled that the women's desire to emigrate with their husbands no doubt contributed to the formation of a permanent community of migrant fishermen in Pointe Noire. The Popo women have entered the fishery "network" notably by taking care of processing and sale. Their maximum daily smoking capacity, estimated at about 90 tons of sardinella, absorbs the total catches landed by the Popo fleet. The women therefore participate effectively in the success of foreign fisheries in Pointe Noire, to the extent that they ease a potentially constricting area through the disposal of the perishable foodstuff. The fishermen can therefore, within certain limits moderately increase production without having to worry about the sale.

The migrant fishermen do not form a closed society. They maintain good relationships with Popo compatriotes in Pointe Noire, some of whom supply part of the fishing equipment. They are an element of the complex system formed by the entire Congolese fishery context.

4. Popo fishermen in the Congolese fishery context.

The Popo fishermen play an important role in the Congolese fishery economy. Apart from their strategic participation in the supply of sea fish, they employ and train many Congolese fishermen. However, they have not had a noticeable effect in encouraging local artisanal fisheries.

Fish supply

The Popo fishermen's catch covers about 70 to 80% of the Congolese small scale fishing production, which represents 30% of the national sea fish production. If the relative importance of this contribution has changed little, the amount unloaded has greatly decreased. 1987 production, an estimated 3497 tons, only represents half of the total catch for 1983. The sardinellas are the most abundant species caught by the Popo (about 60%).

TABLE 1. Evolution of the Popo catch and its contribution to national sea fish production.

Year	Production in tons	Participation in Artisanal	Production in % National
1981	4.757	78,53	26,25
1982	6.232	79,73	32,46
1983	6.929	82,20	31,93
1984	5.941	73,45	30,87
1985	4.661	76,96	33,39
1986	4.429	69,83	32,49
1987	3.497	69,02	-

The presence of Popo fishermen hold a non-negligeable stake in meeting the national demand for marine fish. The national supply only meets 45% of this demand. Congo must therefore import considerable quantities to meet this demand. The fish supplied by the Popo thus contributes in reducing these importations and along with them, the release of foreign currency.

Transfer of techniques and savoir faire

One would expect to find some evidence of transfer of techniques and know-how in the long cohabitation between the "Popo" and the "Vili" fishing. However, it seems that these exchanges are somewhat limited.

Trade of techniques is rare. Certain texts dated 1906 (DARBOUX), 1913 (GRUVEL) and 1955 (ROSSIGNON) etc., are used to explain this, showing that the Popo fishermen did not introduce totally unknown devices to Pointe Noire. However, in some cases Congolese have bought Popo canoes and equipped them like other foreign fishing units. Generally, these initiative end in conflict between the owner and the crew, after a certain length of time.

If the trade in techniques is rare, the local fishermen maintain nevertheless a certain contact with foreign know-how. In fact, many Congolese fishermen are employed by the Popo "companies". This transfer of savoir faire is linked to a lack of fishermen experienced by foreign fishing units. Use of local fishermen

seems the best solution to this problem for several "companies", when failing that of bringing fishermen from Benin or Togo. This phenomenon varies in importance according to the companies involved and the fishing seasons. The number of Congolese fishermen is least in those companies of collective ownership. The opposite case is observed in individually owned companies where local fishermen are dominant in number. The need for Congolese fishermen is greatest in the cold season, period calling for drift nets (sardinella), as Congolese fishermen only provide their workforce.

Studies by GOBERT (1985) show that this phenomenon concerns several Vili fishermen in Pointe Noire. Out of 89 non-owners questioned, 48.3% were fishing with Beninese at the time of the study, 59.9% had done so during the previous dry season and 15% had learned their profession within a Popo fishing team. The principal population concerned is predominantly young (figure 4).

Popo fishermen in the artisanal fishery context

Observations on small-scale fishing, from local fishermen on one hand and participants in development on the other, help us to understand the way in which the Popo are perceived by the others.

Local fishermen

The owners and Congolese fishermen all acknowledge the technical superiority of foreign fishermen. But they differ in opinion concerning the reasons for their success. Certain point out reasons connected with "Company" organization; others put forward magic-religious explanations to justify this success. However, this technical superiority is poorly accepted by Congolese fishermen. It is not uncommon to hear accusations from a Vili owner on the Pointe Noire beaches blaming the Popo for difficulties experienced in setting his nets, as good fishermen are often being transferred to Popo units in the cold season. The same problem is found with the Matombi, who bearly put up with Popo presence in Loango bay in the hot season when they come to fish for bonga (ethmalosa). Tension remains latent and is often expressed by means of threats to the foreign fishermen.

However, incidents between Popo and Vili remain rare, probably smoothed over by the diverse forms of assistance the foreigners give to local fishermen. The Matombi, for example, do not forget help received from Popo crews in the case of an outboard motorboat in distress or a catch too heavy to be handled by a Vili canoe. In addition the Popo, unlike Vili maintain good relationships with the traditional chiefs by paying them fishing rights, thus receiving the latters' protection.

The developers

These are, in a wide sense of the word, experts, administrators, technical assistance, etc. Their observations are significant with respect to their representation to Popo fishery. They generally point out the difference in vitality existing between the Popo and the Vili fisheries. If the first is dynamic, the latter hardly appears capable of any technical or organizational evolution and can at the best only stagnate. Popo fishery appears as a standard by which to evaluate the Vili in order to obtain autodynamic development.

However, foreign fisheries are not taken into consideration - at least not until recently - in development policies. The future of fishing in the Congo does not lie with the Popo, but with the Vili who are considered as priorities in the acts of development undertaken. In this respect, these policies encourage the development of local fishing, to avoid any kind of dependence on migrant fishermen, who are capable of going elsewhere to fish. In addition, Popo fishing does not appear likely to trigger off real development of artisanal fisheries in the Congo: foreign fishermen are blamed for gains accumulation, illegal transfer of capital to their native country, for not investing any money locally, for always seeming "temporary", with reference to their homes, etc.

These observations took on another meaning following work carried out recently by the Plan d'Action Economique et Social (Anon., 1989). The experts are beginning to grant more importance to Popo fishery in the Congolese development policies. They acknowledge likewise that the Popo are active in a social and political environment that does not favour investment, which explains why they limit this to simply replacing their equipment (Anon., 1989:30). In this respect, it appears of primary importance to include the Popo fishermen in the specific measures to be taken within the second development Plan (Anon., 1989:38). A proposal was made to specify their socio-political status generally and in particular with regards to their fishing beaches and living conditions, threatened by the port extension project. These measures were taken into consideration to encourage the Popo fishermen to increase production.

CONCLUSION

The presence of migrant fishermen is beneficial in the present Congolese fishery context. Production figures allow us to measure the strategic participation of migrant fishermen in supplying sea fish. Their presence helps to reduce importations of foodstuffs, which are already too great. In the event of their departure, there would inevitably be a crisis in national fish production. The laps of time necessary to their replacement by Congolese fishermen would be difficult for the country to support.

Foreign fishery however, is an element indirectly blocking the development of national sea fish production. Its influence is equally experienced by the artisanal fisheries as by industrial. In the case of industrial fishing, large amounts of sardinella landed in the cold season by immigrant fishermen cause shipowners to restrict going to sea so as not to overload the market and cause a slump in prices. In addition, local fishermen have gradually abandoned sardinella fishing to avoid competing with migrant fishermen. In doing so they also abandon a fishing technique that provides the best results, quantity wise.

Thus, at the end of this study, it seems of interest to call the attention of practitioners to the ambivalent role of immigrant fisheries in the development of Congolese sea fish production. It is an important factor that should not be ignored when concerning development policies. The aim should be to create a project that can take proper advantage of the phenomenon of coexistence of foreign and local fishermen.

ANNEX

**Groupement de la Colonie Béninoise (G.C.B.)
Section de Pointe-Noire**

**Company regulations in vigour for the Benin fishermen
colony at the Plage Mondaine.**

- Article 1. All fishermen residing on the beach must remain on good terms with each other. Solidarity must be their way of life in society.
- Article 2. In the case of distress at sea, all members must participate in the search for the victims.
- Article 3. In the case of serious illness, the collectivity must repatriate the person should he request it. The costs will be supported by the whole group.
- Article 4. The collectivity must remain on good terms with their Congolese colleagues. Insults and robbery are strictly forbidden and will be punished by a (heavy) fine.
- Article 5. Fetish and cult practices aimed at tainting community life are strictly forbidden.
- Article 6. Theft and harbouring stolen goods is strictly forbidden.
- Article 7. The first rule of community life must be the respect shown to another man's wife. Anyone having relations with someone else's wife will be driven from the group and immediately repatriated for his own safety and to avoid incidents.
- Article 8. Slander and vandalism will not be tolerated. Persons guilty will be severely punished.
- Article 9. Proper dress at all times is obligatory.
- Article 10. The beach will be kept perfectly clean.
- Article 11. These rules and regulations have been read and approved by the entire Benin fishing community.

Pointe Noire, 15/09/1967

Chief of the Beninese fishermen

SEVI KASSA

Table 2. Summary table of the main characteristics of the two "types" of fishing

Type of Fishermen's Location fishing origins			Approx. number	Vessels				Specialisation Index Gear						Target fish		
				(1)	(2)	(3)	(4)	DNS	DNB	IDN	BSG	BS	HL	(5)	(6)	(7)
FOFO	Benin Togo Ghana	Pointe Noire	1,000	11m	3t	142	100%	+	-	-	0	0	-	+	0	0
VILI	Congo Cabinda	Whole Coast-line	1,000	6m	1t	400	10%	-	+	0	+	+	+	0	+	+

Explanation:

- | | | | |
|---------------------------------|--------------------------------|---|------------------------|
| (1) Length over all (in metres) | DNS : Drift net-sardinella | + | very specialised |
| (2) Capacity (in tons) | DNB : Drift net-bonga | 0 | not very specialised |
| (3) Total numbers | IDN : Large (meshed) drift net | - | not specialised at all |
| (4) Rate of motorisation | BSG : Bottom-set gill net | | |
| (5) Sardinella | BS : Beach seine | | |
| (6) Bonga (Ethmalosa) | HL : Hand-line | | |

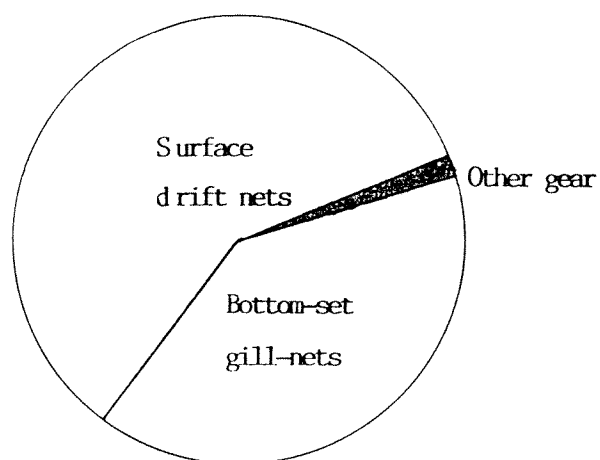


Fig. 3 – Proportion of fishing trips according to gear used

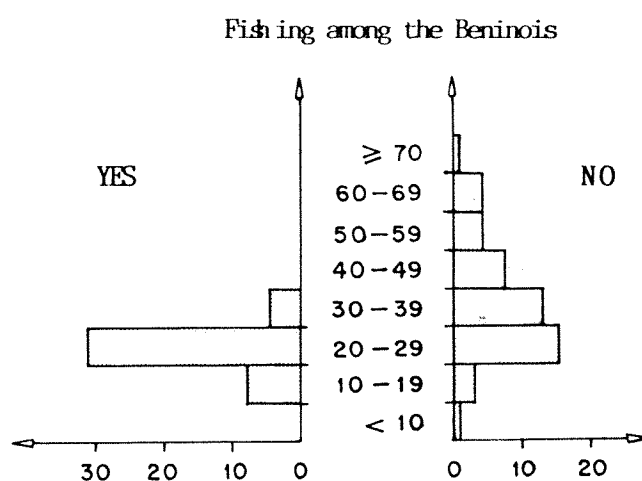


Fig. 4 – Age pyramid of the Congolese fishermen participating in the Beninese fisheries

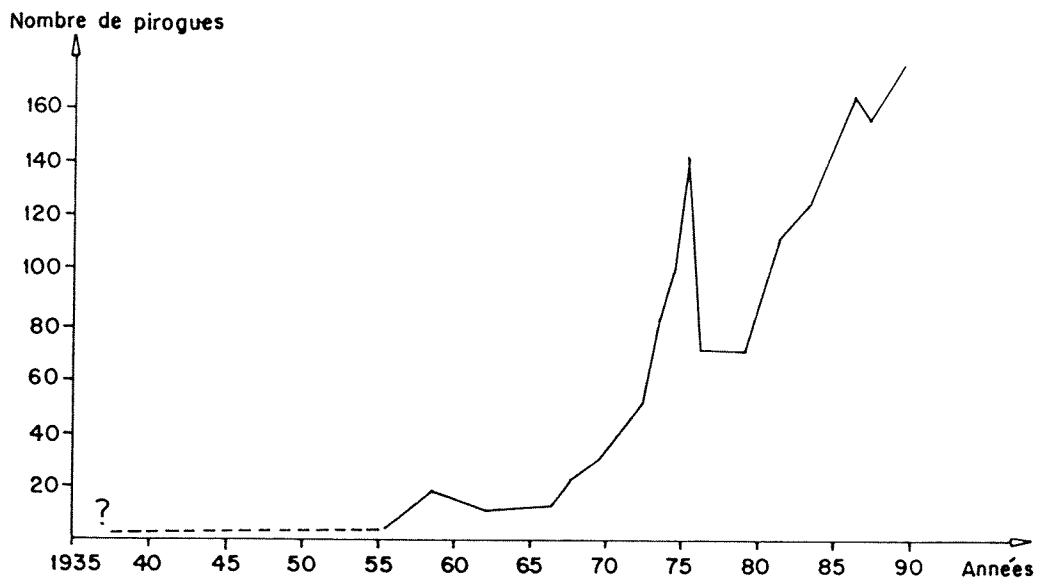


Fig. 1_ Evolution in the number of foreign-owned canoes based in Pointe Noire

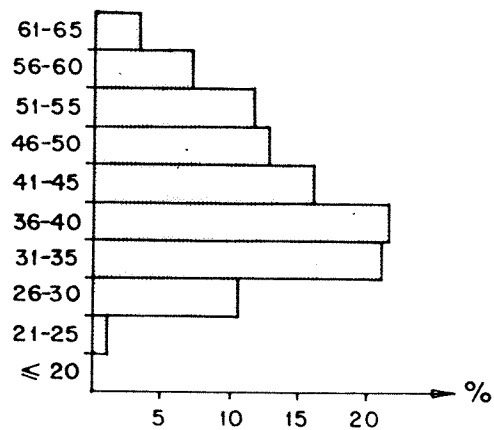


Fig. 2_ Population age structure among the Popoh fishermen
(d'après CHABOUD, 1982)

THE MIGRATION OF GHANAIAN WOMEN IN

THE CANOE FISHING INDUSTRY

by

Irène Odotei

Introduction

In Ghana, fishing is one of the major occupations in which gender roles are clear-cut and specific. Men go to sea and women stay on land to process and market the catch both in local and distant markets. This means that without the complimentary role of the women, the efforts of the men will come to nothing. Since fish is a highly perishable commodity, it needs to be handled immediately it is landed. This explains the need for another group of people who have not spent hours on the sea as the fishermen to handle the fish. In Ghana, this role has been played by women for centuries and continues to be played by them. The role of women in this economic venture is therefore firmly embedded in the traditions of the people. It is impossible to imagine the fishing industry in Ghana without women.

As in other sectors of the economy, the fishing industry has had its share of innovations which have led to repercussions in the traditional relationships of production and distribution. Formerly, men manufactured their own gear and used physical energy to propel their crafts. As they started depending on imported inputs they began to rely on savings accumulated over a period of time with supplementation from kinsmen to start their fishing ventures. With the introduction of mechanisation leading to the need for outboard motors, bigger canoes and nets, the initial capital investment went beyond the saving capacity of the fishermen. This was aggravated by high maintenance and fuel costs. Apart from initial help given to fishermen by way of credit to encourage them to use the outboard motor, the financial institutions have not kept pace with the fishermen's need for cash to run their business. The fishermen have therefore had to rely on their business partners and associates, the one group which has a vested interest in their venture - the women fish handlers and processors.

Through this, women have crossed the role demarcation line and we are now actively involved in fish production as financiers and sometimes as owners of the means of production. It appears that women's involvement in production predates mechanisation. In the Anlo area, the seat of beach seine fishing in Ghana, the purchase of the first beach seine net, Yevudor (European net), is

credited to a Woe woman named Afedima, a wealthy daughter of a prominent local man Anatsi, (Nukunya 1989). The fact that the beach seine was introduced to the Anlo coast between 1850-1860 shows the extent and dimension of the participation of the Ghanaian woman in the fishing industry (Nukunya 1989).

Migration

One of the integral features of the fishing industry in Ghana is migration. In keeping with the seasonal movement of fish, especially the Sainella from July to October, fishermen have developed a tendency to follow the fish to the locality which is experiencing its glut season at any particular time. Such movements last only for a season with the fishermen returning to base at the end of the season. Other types of migration last for multiple fishing seasons leading to semi-permanent or permanent residence with the possibility of partial or total integration into the host society. This type of migration is either internal or external, taking the fishermen across national boundaries to other West African countries such as Liberia, Gambia, Sierra Leone, Cote d'Ivoire, Togo, Benin, Nigeria, Camerouns and Gabon.

A mode of organisation of the fishing industry and its resultant dependence by the fishermen on their wives and kinswomen for the success of their business pose a problem for the fisherman whenever he decides to move from his own locality. He is faced with two options. Either he goes accompanied by his wife as business partner or associate or finds someone else to play the role of, at least, the business partner ; otherwise the economic mativation for the trip will be defeated. The ultimate decision taken by the fisherman depends on his final destination, the type of fishing he engages in and the proposed length of stay. For example, Ewe fishermen who travel in large companies on account of the labour needed to operate one beach seine net, always travel accompanied by women. They usually acquire a tract of land at the beach in their host community, build temporary structures, and live by themselves with their women processing their catch. (Nukunya 1989)

On short term seasonal migrations, fishermen tend to rely on a local woman who acts as hostess business associate, guarantor, and mother, all rolled in one. She is the one who looks for accomodation for the fishermen when they first arrive, introduces them to the chief fisherman and sees to the payment of their "beach drink" or fees. She advances them money or guarantees such advances for the purchase of fuel or repairs to fishing equipment. She is referred to as fishmother, loonye in Ga. In return the fishermen sell their catch to this local fishmother who renders account to them at the end of the fishing

season or periodically as agreed upon. As the season extends to years, the fishermen are joined by their wives. They participate in the fish handling as processor and distributor without ousting the local fishmother. The wives realise that being foreigners, like their husbands, they need local support which is represented by the fishmother.

This role played by the fishmother in seasonal internal and external migration can also be found in extended external migration where migration takes place to an area where local women play an active role in the handling of fish. In some cases the women actually invite the fishermen, advance them money for the purchase or repair of fishing gear and work in partnership with them til the debt is paid. Examples of such a situation can be found in Togo and Benin.

From the above, it is clear that the migrant Ghanaian fisherman is sometimes caught between loyalty to his wife's business interests which are intricately interwoven with his own economic succes and role as husband, and own business security manifested in access to local credit and support represented by the local hostess or fishmother. The lot of the migrant Ghanaian woman, fish dealer or processor, is by no means simple or straightforward. She is caught in a web of co-operation, competition, conflict and, sometimes, downright hostility from local women. Does she stay at home to avoid all these problems or does she migrate ?

Causes of Migration

The major cause of migration among the female migrants interviewed in Cote d'Ivoire and the Republic of Benin is to join husbands. The success of the move leads to chain migration in which daughters, youngers sisters, nieces and other relatives join the wife to help in processing, handling of the fish and other commercial activities which are labour intensive. Widowed, divorced and, occasionally, married women accompany or join male relatives.

Purely economic considerations are also found to be the motivation of some of the women. Like their male counterparts, these women migrate to accumulate capital for a particular venture, such as building or completing a house and to acquire a few consumable items. Like cloth, household utensils, toiletries, perfumes, etc. Some were pushed out by economic hardships at home aggravated by marriage problems, sickness or the death of a child. A group of female migrants who are operating independently outside any male control were found in Vridi III in Abidjan.

The above classification is not meant to suggest that wives are devoid of any economic motives in migration. The weak position of women in traditional inheritance of property and their virtual exclusion from joint ownership of property with their husbands make it imperative for them to try and seek their own economic security even as they help their husbands. They are expected by their extended families and society at home to have acquired something for themselves and for the benefit of other members of the family or lineage.

The interplay of dependence and independence with varying emphasis on the women's roles as wives and mothers, business partners and associates, managers employees and independent traders, provides a fascinating spectacle:

Wives and Mothers

As wives and mothers, the women's first responsibility is to their families. It is primarily as wives of the fishermen that they have left home. For most of them, the change in residential pattern alone is enough to emphasize this role. This however, varies with the ethnic origin of the women. For the Ga and Fante, marriage in their hometowns is duo-local (Hagan 1983). The wife lives with her female children and male children under ten years of age among her own kin. All her cooking and commercial activities take place there. She sends her husband cooked meals and goes to sleep with him in his house, which he also shares with his male kin.

This residential arrangement give the wife some freedom to organise her domestic and commercial activities. Among the Fante it is not unusual for a woman with married daughters to do the bulk cooking, dishing out the meals for her daughter's husbands from a central pot. In this situation, one person can do the cooking whilst the others tend to the processing of the fish or any other commercial venture. The residential pattern provides a good setting for a familiy co-operative with varying degrees of formal and informal profit sharing commonly found among the Ga and Fante.

When the women move to join their migrant husbands they lose the labour provided by their kinsmen at home. They make up for this loss by keeping their daughters with them and sending for other female relations to join them. Among the migrant fishing communities, no female member of the community is too young to be part of the labour force. From the age of eight years or earlier, female children engage in fish processing, hawking or taking care of younger siblings. This has adversely affected female education.

The women also have to contend with the presence of their husbands in the home and the possibility of their knowing more than they should about their profits and other matters. They have developed techniques of avoiding the scrutiny of their husbands. It appears that migrant Ewe women do not have this problem of learning to live with their husbands since they are used to that residential pattern in their hometowns.

It must be stated that not all members of the fishing company travel with their wives. Wives of canoe owners and bosuns invariably migrate with their husbands. Other members either make their own decisions or are encouraged or invited by the company to migrate with their wives. In cases of polygyny, a man travels with his first wife or the wives take turns to go and stay with him for periods.

In the artisanal fishing industry, the conjugal role of women is so intricately bound to their occupational role that it is quite difficult to distinguish between the two. As wives, the women act the varying roles of employees, business partners and associates and independent operators.

Each role is determined by the type of fishing engaged in by their men, and circumstances in the locality of operation and the period.

Business Partners and Associates

The woman's role as business partner of her husband is the mode of operation which exist in some of the Fante towns.

In this instance, the women either sell the fish in its fresh or processed state and render accounts to the men who then give a portion of the proceeds to their wives. This mode of operation is not common. A typical example of this was found with the Fante Tenga fishermen at Placondji and Akpakpa Dodome. As soon as the fishermen land his catch, he hands over the fish to his wife. The wife carries the fish from the canoe and sells it without any interference or even the presence of the husband. The wife renders accounts to the husband when he goes home but she continues to keep her husband's money. She goes with him to the market to pay for inputs needed to repair damages to the nets. In this way the woman acts the role of sales manager, purchasing officer, accountant, banker, and wife, all rolled in one. When questioned about this mode of operation the men at Akpakpa Dodome explained that they spend hours at sea leaving their unlocked palm-frond houses at the mercy of storms and intruders. It is therefore safer for them if the women keep the money, knowing how to protect it in the face of crisis. The younger men are against this mode of operation but are unable to change the tradition.

The women also claim that they are protecting the men's interest by keeping their money which could easily be dissipated by them on drinks.

With such financial control in the hands of the women, their honesty is stretched to capacity. This is more so since Tenga, the type of fishing done by their husbands, involve small quantities of fish. Unfortunately for them, they are not allowed by the local women to sell directly to the consumer and are also frustrated in engaging in other commercial activities. The women were therefore easily accused of misappropriating their husbands money. To avoid total dependence on their husbands' money and to be able to lay claim to some money they can call their own, the women have developed a marketing technique aimed at helping each other at Cotonou harbour.

As soon as the wife of a fisherman unloads her husband's catch, the other women rush in to take some for themselves. After bargaining, they resell to Beninois fish dealers who in turn sell to the consumers. No loss is entertained in this kind of transaction. If the Beninois woman offers less than the agreed price between the two migrant women, the seller goes back to get the consent of the original owner before sale. This is to ensure that she makes at least a little profit on the sale. By so doing, the women legitimize the personal profit they make on their husband's catch. To avoid any controversy they try to hide personal effects they buy from their husbands.

It was observed that the more common role in this category is that of business associates. This is a continuation of the role the women are used to playing at home. This was observed among the Fante women of Vridi III and Grand Bassam in Côte d'Ivoire, and the Ewe women of Port Bouet and Cotonou. In this instance, the women, comprising mainly wives and relatives, buy the fish from the fishermen and sell it fresh or in a processed form. The profit made by the women is their own money. In Ghana, fishermen do not give their wives daily, weekly, or monthly chop money but give them a some capital to trade with. They also give them what is known as "eating fish", yeli loo in Ga, when they return from fishing trips; It is out of the profits accrued from a woman's enterprise that she is supposed to cater for the needs of her husband and children (Hagan 1983). In the migrant situation, wives receive regular chop money from their husbands but this is normally inadequate for the needs of the family. The women therefore supplement the chop money given by their husbands with their profits from their business. When the fishing business is going through hard times, the men depend entirely on their wives for support since whenever possible, they engage in other commercial activities such as food processing and the sale of cooked food, provisions and alcohol.

Each group in this relationship realises that the success of his or her business depends on the other. The fisherman must make enough to maintain his gear to continue fishing and maintain the family ; and the wife must also make enough to maintain the family and, occasionally, act as a source of credit for the husband. Above all, both groups must make enough to take home to make the whole migration venture worthwhile. This is observed in the distribution of fish and the bargaining. In the distribution of fish to the women, the maxim, as stated by Mr Defeamekpor, the leader of the Ewe migrant fishermen in Port Bouet, is, "Everybody must eat". After the bargain has been struck, if the women make a loss on the sale at the market they always come back to plead with the fishermen for a reduction in price. In the bargaining for the fish with the fishermen, the women usually look up to the wife of the boat owner as a natural leader. She performs a balancing act between her own apparent private interest tied up with that of the women, and the interest of her husband. In cases where local women join migrant women in buying fish from the fishermen, the migrant women get rebates privately in their homes after the transaction, when they ask for it and the fishermen think their demand is reasonable.

Credit facilities given to the women enable them to get as much fish as they can cope with from the men when the catch is good and there is no competition from the local women. The women of the Ewe town of Kedzi developed a very lucrative network with the migrant Ewe fishermen in the republics of Benin and Togo. They used to go round purchasing fish from the different companies. They smoked the fish and transported them to Keta, which was then a very important market centre, for sale. They either kept the money for the companies or gave them to relatives as directed. They also acted as purchasing agents for the fishermen, buying materials for repairing their nets on the return journey. The Fante women also used to export fish from Grand Bassam for sale at the Fante market of Mankessim in Ghana.

In the relationship between the migrant fishermen and their women-folk, the key word is adaptation. Women are therefore found to be playing yet another role in the fishing business. They can be described as employees, shareholders and agents.

Employees, Shareholders and Agents

This multiple role was observed among the Ga-Adangbe migrant women. They appeared to be the most displaced in the fishing business. In Lomé and Cotonou, the local women use their financial power over their husbands business to squeeze them out. The local women act as fishmothers for the migrant Ga-Adangbe fishermen. Some of the fishermen migrated on invitation by these local fishmothers who give them loans to purchase part of the gear. The fishermen pay for the loan by selling their catch to

these fishmothers who use it as payment for the loan. As strangers and debtors, the fishermen are at the mercy of these local fishmothers. Their wives are not entitled to any of the catch. In order that their wives can earn a little income, the fishermen employ them as porters, carrying the fish from the canoes to the point of transaction at the beach. Payment is done with fish at the discretion of the fishermen. This gives them a chance to be generous to their wives when possible.

In Abidjan, the Ga-Adangbe migrant women are forced out of dealing in fish not by local fishmothers, but by the mode of operation and local taste. Here, the sale of fish is by auction done by men and purchased mainly by men. There is also a special market for male fresh fish retailers. Women who sell fresh fish usually buy it from the men after they have bought it at the auction. Only those who have access to the market are able to buy. These are mainly Nzima women who can easily claim to be Ivorians because of the national border which cuts through their ethnic group making some Ghanaians and some Ivorians. Unfortunately for the Ga-Adangbe women, the type of fish caught by their husbands, mainly sea bream and grouper, is preferred fresh by the Ivorians and the large expatriate community, so they cannot even smoke it.

Fortunately for this group, the type of fishing, long distance handlining, done by their men has given them other opportunities. The men are away five to ten days at a stretch and when they come home they stay for only two or three days. They need the services of women to cook and wash their clothes for them. Two to four women, usually the wife of the Bosun and the wives of two or three hardworking men of the crew are incorporated into the company to provide these services. These, together with the men of the company, are considered shareholders or employees. At the end of the accounting season, they are given share of the profits, but they do not receive the same amount as the men. The women are grouped together and given the equivalent of a single man's divided or pay.

This is not their only source of income. They act as chandlers for the fishermen. This is reckoned as their private business so they are given loans for it. They purchase the food for the men's fishing trip and are paid when the fishermen return from the trip. They take turns in doing this with the fishermen giving extra money when paying the bills, as a sign of appreciation, when the food requirements have been met. Some of the women also supply the canoes with engine oil. Besides all these activities, the women utilize the free time they have when their husbands are away in doing their own business, mainly the sale of cooked foods. It is not surprising that these women appear to indulge in conspicuous spending beside having completed or being in the process of building houses in their home towns.

Independant or Free-Lance Operators

This group of independent operators were observed in Vridi III. They are a group of Ga-Adangbe women whose presence or operation in Abidjan does not depend on their marriage or blood relation with any man in the fishing business. They are mainly between the ages of 20-30, usually unmarried, separated or divorced. They work in companies of three to six comprising of relatives or firends. They have neither ovens, adequate capital nor supply of fish, so they hire ovens from male Moshie fish smokers who have left the business to sell petrol. They buy fish from either the Fante fishermen when their wives cannot buy all the fish or left-over herring bait from the hand-lining fishermen or fish fryers when the fish has become too fermented for their purposes. They occasionally buy fish from the harbour, but the expenses involved are too much for their meagre capital, rendering the whole venture unprofitable. When they cannot get fish they hire their services to the Fante fish smokers. The service of migrant Ghanaian women to the fishing business or community also takes other forms which can be described as support services.

Support Services

There are a group of migrant Ghanaian women who work in the market at Abidjan as fish dressers. Having observed that Ivoirian ladies do not like dressing fish, they offer their services in dressing their fish purchase for a fee. Migrant Ghanaian women operate as food vendors, hawkers, dressmakers and hairdressers for the fishing community, other Ghanainan migrants and Ivorians. Women traders also act as couriers taking provisions and personal effects of the migrants from the host countries back home. They also help them in the transfer of currency by using the fishermen's money to buy goods and paying for them at home in cedis. By so doing, the traders have a source of credit and the fishermen have their money transferred so that they do not have to worry too much when they are compelled to leave their host country under hostile circumstances. This relationship is beneficial to both traders and the migrant fishing communities. Apart from the material services offered by women to the migrant fishermen, female spirit mediums and syncretic prophetesses follow the migrants with their services. They sell herbs and other concoctions and perform rituals meant to give solutions to their health and other problems which are invariably linked with the spiritual.

Boatowners

Cutting accross all the various roles mentioned above is the role of boatowners. The boatowners can emerge from any of the groups. What is needed is capital and the capital can be moved

from one section to the other. Ghanaian women in the coastal communities have a philosophy that a woman should not be limited to one occupation. She should be able to move from one to the other or to take on two if possible. Migrant women who are not originally engaged in fishing sometimes use their profits from other ventures for fishing investment. Migrant women were observed to own purse-seine (watsa, sieve), hand-lines and ali canoes and gear. These boat owners normally have a male relative who controls or supervises the actual operations.

Effects of Migration

Both internal and external migration affect Ghanaian women in the fishing business individually and collectively. The congregation of migrants in locations based on family, ethnic and friendship ties, give the women a chance to socialise. They form benevolent societies and local savings and credit unions known as "Susu" groups which help them on occasions of illness, death and birth. This is very essential for the women who have to live without the security and support of the extended family. The men appear to be sensitive to the vacuum created by the absence of the family and try to make up for it. One woman in Abidjan remarked : "They have brought us here and are responsible for us. Our families are not here so they have to be our fathers and mothers". On the other hand, marriages and liaisons contracted away from home are treated very casually and the women involved end up as losers.

The migrant women also act as agents for the spread of Ghanaian culture. They introduced Ghanaian foods to the host communities. A typical example is found in Abidjan where Ghanaian cooked foods are conspicuous in the markets and chop bars. The migrant women also claim that they introduced hawking and the Ghanaian way of putting on the cloth and top (Kaba) to Abidjan.

The migrant women become very conscious of how they look when they return home. They buy very expensive cloth especially imported Dutch Wax print and some of them use skin lightening creams to bleach their skins. In fact, the difference between the men and women is not that great when it comes to expectations and contributions to their own communities. Some build or renovate houses and share in the general responsibilities of improving their own home communities. In this regard one can say that the importance of the Ghanaian woman in the migration of the fishermen cannot be overemphasised.

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